Universities and higher education providers

The Good Universities Guide 2024

The only source of 5-STAR performance ratings

gooduniversitiesguide.com.au

You decide what your future looks like

Be empowered to direct your own learning experience. If you have a career in mind, you can structure your degree from day one to gain the skills you need. Or you can explore your options first, with the flexibility to discover your passions and strengths along the way, specialising when you're ready. The path is yours to create at Melbourne.

Start your journey in 2024
study.unimelb.edu.au

THE UNIVERSITY OF MELBOURNE

CRICOS 00116K

University of Southern Queensland

As the world changes, UniSQ degrees evolve

Software App Development

AI and Data Science

Wildlife Management

Aerospace Engineering

Environmental and Sustainable Resources Engineering

Physiotherapy

Going beyond begins here

unisq.edu.au

CRICOS: QLD 00244B, NSW 02225M TEQSA: PRV12081

Good Education Media

The publishers and authors have attempted to ensure the accuracy and completeness of the information contained in this publication; however, no responsibility can be accepted for any errors and inaccuracies that occur. The information contained in this Guide is correct at the time of publication (August 2023).

National Library of Australia cataloguing-in-publication data:
The Good Universities Guide and The Good Careers Guide 2024
ISBN: 978-1-921199-25-7
ISSN: 2653-6129 (Print)

Published by Good EDU Holdings
Printed and bound in China by Asia Pacific Offset

© 2023 Good Education Group Pty Ltd
All rights reserved. No part of this publication may be copied or reproduced, stored in a retrieval system or transmitted in any form or by any means — electronic, mechanical, photocopy, recording or otherwise — without the prior written permission of the publisher. Compliance with the Trade Practices Act 1974 of advertisements contained in this publication is the responsibility of those who submit the advertisement for publication.

Newsagent distribution: Are Direct
International distribution and Australian order: Good EDU Holdings Pty Ltd, Melbourne, Victoria
Online purchases: www.goodeducationbookshop.com
Web: www.gooduniversitiesguide.com.au
Email: info@goodeducation.com.au

www.gooduniversitiesguide.com.au

The Good Universities Guide 2024

Section 1: Getting a tertiary education

What are the options? 3
Studying online 5
Qualifications explained 6
Choosing a course 7
Applying and getting into your course 12
Pathways to university 15
Student equity 17
Paying for your course 19
Financial help and scholarships 22
Starting your course right 26
Getting help and support 27

Section 2: Ratings & rankings

Characteristics 33
Graduate outcomes 39
The student experience 40

Section 3: Where to study

Institution profiles 48
Higher education providers A-Z 72

The Good Careers Guide 90

Section 1:

Getting a tertiary education

Getting a tertiary education

Over the years, the number of students in higher education has grown exponentially, and there are many more providers of higher education than in previous decades.

Does everyone get in?

While not everyone will have the academic results to get into university, the odds are in favour of students. Enrolments have been growing due to efforts to make university-level study more accessible, especially for school leavers.

Is it worth it?

Most students will find that a tertiary education 'pays off', although it's worth considering that the graduate job market is very competitive, which can make the initial job hunt a little tricky. Employment data shows that graduates can expect largely positive outcomes across the board.

What are the options?

The structure of bachelor degrees has been much the same over the last century, but things are changing, with more learning happening outside the traditional classroom — through industry placements, international exchanges and increased online and mixed-mode learning.

Combine two degrees

Many first-year students struggle to decide exactly what they want to study, which makes pursuing a double degree a worthwhile option. These degrees can take up to five or six years to complete.

Pursue an advanced program

An increasing number of institutions are introducing selective streams in general degrees such as arts, science and business. These streams are often called Dean's Scholars or advanced degrees and are designed for high achievers, with a cut-off score far above a regular degree in these fields. They offer much the same curriculum as the standard degree, but with a selection of extra opportunities.

Fast-track your degree

Increasingly, more universities are offering the option of a third study period during summer. These three study periods are called trimesters. By fitting an extra semester's worth of material into each year, students can graduate from a standard three-year degree in two years. Even if your course is not available in trimester mode, a summer semester might be an option for certain subjects.

Do a two-part degree

Some Australian universities have adopted a model that sees students complete a general undergraduate degree in a discipline such as arts, science, health science or design. Graduates who want to qualify for regulated professions — such as architecture, law, dentistry or medicine — then go on to a specialised postgraduate program to gain industry accreditation.

Good Universities Guide

Adventure for all

gooduniversitiesguide.com.au

Studying online

Many people have trouble fitting study into their lives, and others may not be able to study on campus due to their location. Even if you can't get to the classroom, you can complete a course online.

Online study gives the option to enrol in single subjects or entire courses, often without setting foot in an institution. Since the arrival of COVID-19, increasingly large number of courses are available. A few of the main drawcards of online study are the flexibility and the option to accelerate a course or spread it out as needed.

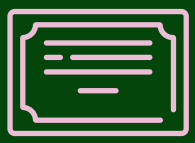
Courses with a practical element, such as nursing or teaching, may require some time on campus, while others can be completed entirely online. Often courses are delivered in 'mixed mode', which means a combination of face-to-face contact and online delivery.

What to expect

The difference between on-campus and external study modes are not as pronounced these days. Along with weekly readings and discussion boards, lectures will usually be recorded and uploaded online. As new technologies emerge, online students have been able to learn course material online, with engaging audio-visual content and discussion forums that serve as virtual classrooms, giving them the ability to interact with tutors and fellow students. Some institutions will supply lectures as audio or video recordings that can be downloaded.

Qualifications explained

Australian qualifications start at certificate I and go right up to doctorate level. They include, but are not limited to, the following:

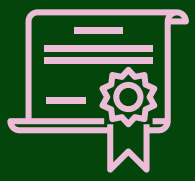


Certificates I–IV

Certificates I-IV provide introductory training and deliver industry-specific knowledge, along with skills in communication, literacy and numeracy and teamwork.

Duration: Six months to two years (full-time)

Offered by: Schools, TAFE institutes, RTOs, private higher education providers and universities



Diplomas

Diplomas prepare students for paraprofessional, industry and enterprise careers. Some diplomas can be completed at university level.

Duration: One to two years (full-time)

Offered by: TAFE institutes, RTOs, private higher education providers and universities

Bachelor degrees

Bachelor degrees are the main award offered at the higher education level. They prepare students for entry into a range of professions and postgraduate study.

Duration: Three to five years (full-time)

Offered by: Universities, some private higher education providers, TAFE institutes and RTOs

Masters and doctoral degrees

Masters degrees are designed to provide in-depth understanding in a specific area of knowledge through coursework, research or a combination of both.

Doctoral degrees recognise the highest level of academic achievement and require an original contribution of knowledge to a particular field of study, usually through a substantial thesis.

Duration: One to four years (full-time)

Offered by: Universities and some private higher education providers

The Australian Qualifications Framework regulates all Australian qualifications, making it easier to progress from one qualification to the next. For more information, visit their website at www.aqf.edu.au.

Choosing a course

Once you have worked out which field you are interested in, we recommend making a checklist of all the things that you require in a course and weighing up each course against these points.

The best way to find out what a degree is really like is to hear from those who have done it. Refer to the ratings in this Guide to find out how satisfied graduates are with their experience. It's also a good idea to refer to course outlines, which can generally be found on institution websites, to see what types of subjects are on offer and how the course is structured. Here are some factors to consider.

What will you learn

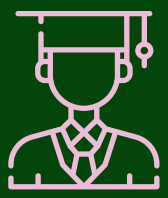
Different programs teach very different things — even courses in the same field may be taught differently at separate institutions. They should concentrate on topics you are interested in or that are professionally relevant. Keep in mind that some courses (engineering, for example) require all students to complete the same core subjects to meet industry requirements and don't allow a lot of room to choose electives or explore different subject areas. Others, such as humanities, give you the freedom to choose a broad range of electives and graduate with a specialisation or major.

How will you be learning it

Some courses are mainly quantitative, and others are verbal or language based. Some are conceptual, while others require you to apply your knowledge practically. Work patterns also vary between courses — some have fewer hours spent in class and require more self-directed study, while practical programs involve more contact hours and special classes.

Are you choosing a course for the right reasons?

There are multiple factors to consider when making your decision, and some factors are more prudent than others. To make sure you get on the right path, here are some motivations you don't want to be led by.



You're expecting a high score so you're opting for a tough course

After working hard all through Year 12, you might be on track for a top-notch ATAR. Although receiving a high score will open your options, avoid choosing a course just because it's competitive. Opting for medicine only because you got the right marks is pointless if you're not passionate about science, or if you're squeamish. Bear in mind that cut-off scores don't always reflect the difficulty of the course — a high entry score may just be reflective of the course's popularity.

The field of work seems glamorous

Do your research to get an idea of what working in the field will be like. Talk to industry professionals and course coordinators for areas of interest (open days are great for this), as well as people employed in the industry. Getting real insight can make all the difference. Too often, students select courses based on assumptions that are more exciting or glamorous than the reality; for example, choosing medicine or law based on what they've seen on TV. Keep in mind that all courses and careers have pros and cons — the trick is to find a good balance, and one with negatives that you're willing to put up with.

There's pressure to commit to a specific uni or course

Don't let parents, teachers, friends or others sway your decision when it comes to choosing a course or institution. These are decisions that will affect your life, so you need to make them for yourself.

If you're experiencing parental pressure to pursue a path that doesn't interest you, consider inviting them to open days or career expos. This could give them some insight into your decision-making process and broaden their ideas of what's out there.

You've heard the job pays well

It's a smart idea to look at graduate outcomes for courses you're interested in; however, don't choose a course solely on expected salary, job growth or graduate employment rates — these could change by the time you finish studying. Choose a course and career that match your interests and skillset, and the lifestyle you prefer.

Study mode

You may find that your course has part-time or online options. Some also offer trimesters, optional summer semesters or fast-track options, allowing you to complete your degree in less time. While the typical bachelor degree can be completed in around three years, some (such as medicine or psychology) may require five or six years of full-time study, plus an internship period to gain full accreditation.

The end result

If you are sure about your career, you might opt for one of the more specialised vocational options so that you can immerse yourself in your field in greater depth. If you're not 100 per cent on what the future holds, you could enter a generalist degree that will give you room to explore various fields.

When selecting your course, be realistic about your job prospects after graduation. It is also important to check whether your course is accredited by relevant industry bodies.

Getting into the course you want can be tricky, but rest assured there are many different pathways that you can pursue. The most important thing is to understand the application process and entry requirements, which can vary between institutions and courses.

Choosing a tertiary provider

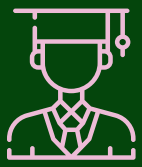
It's common to choose an institution based on its distance from home and course offerings. These are perhaps the key factors, but they are not the only things to think about. Consider the following characteristics as you conduct your research.

Private or public

Most Australian universities are public, meaning they are funded by the government. Private institutions are independent and usually rely on full tuition fees to subsidise student places. While universities offer a range of fields of study, private education providers often specialise in a discipline or provide a specialised campus environment.

Cost

Does the institution offer Commonwealth Supported Places in your field of study? Are government loan schemes available? Does it provide scholarships?



Graduate satisfaction and outcomes

It's a good idea to see how your institution ranks in key areas such as teaching quality, graduate starting salaries and overall experience. see the Ratings section of this book to check how each institution stacks up.

Study mode

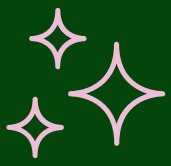
You may find that each institution offers different study modes for your course, such as part-time or distance options. Some also offer trimesters, optional summer semesters or fast-track options that allow you to complete a degree in less time than the standard three or four years.

Student body

Are there more school leavers or mature-age students? Does the student body contain a lot of international students to add to the cultural diversity? Are most students studying on or off campus?

Student facilities and services

Institutions differ in terms of the range of services and facilities on offer (think sporting fields and academic support), often depending on their size and location. Also look at the facilities relevant to your field, such as moot courts for law students, or counselling and health clinics that are open to the public.



Special expertise

Although most institutions have a mix of academic and vocationally focused courses, they tend to emphasise one or the other. Some also specialise or excel in particular fields of study or have a special focus on either teaching or research.

Entry flexibility

Institution entry requirements may be a deal-breaker. Entry requirements often differ considerably between each institution, even for very similar courses. Alternative entry schemes and credits provided for previous study tend to vary too.

Location and atmosphere

Would you prefer an intimate regional environment or a buzzing metropolitan one? Every institution has a different atmosphere, so be sure to take the time to visit before applying. You may also wish to choose a location that specialises in your field or has a better range of job opportunities (for example, WA for mining engineering). If you are moving to study, consider the cost of living and accommodation options available.

Applying and getting into your course

Getting into the course you want may or may not be tricky, but rest assured there are many different pathways that you can pursue. The most important thing is to understand the application process and entry requirements, which can vary between institutions and courses.

How to apply

There are two methods for applying: Tertiary Admission Centres (TACs) and direct application. You will find that most universities take applications for undergraduate courses through the local TAC. Private colleges and TAFE institutes typically take direct applications, but there are many exceptions.

Standard entry requirements

School leavers are usually required to meet standard academic entry requirements set for each course: cut-off scores based on the minimum ATAR required, and the completion and score of prerequisite studies.

Non-school leavers are often admitted using alternative selection criteria, such as potential to succeed in tertiary study or Recognition of Prior Learning (RPL), which takes into account previous tertiary studies or relevant work experience. This may be determined through an interview, an aptitude test such as the Special Tertiary Admissions Test (STAT) or a supplementary information form.

Some courses have additional selection criteria — especially those that are competitive or require a degree of talent. This includes portfolios, auditions, interviews or tests, including the University Clinical Aptitude Test (UCAT).

Alternative selection methods

Some higher education providers may consider your performance in an interview, relevant experience in the workforce or other study completed after school (through RPL), a statement of suitability from a reference or an aptitude test.

Alternative entry and equity schemes

Most higher education providers have special schemes for applicants who might otherwise find it difficult to enter their courses due to disadvantage or special circumstances. Education providers use these schemes to assist students from recognised equity groups, who may otherwise not meet the standard selection criteria, or have experienced difficult circumstances throughout their schooling (such as family disruption or finishing school during the pandemic).

Want to learn more about how to research and choose a career?

Find all that and more in *The Good Careers Guide* — just flip this book to check it out!

Pathways to university

If you're concerned that you won't meet the entry requirements for your dream course, don't worry — there's more than one way into a course.

Bridging and foundation courses

Bridging courses provide you with the opportunity to fill a gap in an area of specialist knowledge that is a prerequisite requirement for a tertiary course.

Foundation, university diploma (sometimes called an undergraduate certificate), enabling or preparatory courses cover a broader range of topics and usually take around a year of full-time study. Successful completion of a foundation course usually provides direct entry into the degree, often with credit.

Course transfer

If you don't get into a popular course at your preferred institution, you can enrol in a similar course with a lower cut-off score. If you perform well in the first year, you'll usually able to apply for a transfer into your desired course, sometimes with credit.

Most commonly, institutions expect you to have completed a minimum of one semester of study (sometimes up to a year full-time) or have maintained a certain academic average. Transfer rules can vary between institutions and courses, so always check with your institution before making any plans.

VET study as a pathway

Vocational Education and Training (VET) courses can improve your chances of being accepted into an undergraduate degree. Courses at certificate IV, diploma and advanced diploma levels can provide credit towards further study. For example, a student who graduates with a diploma from a TAFE institute may receive up to a year of credit towards a related degree.

If you're worried about meeting the entry requirements for a degree, another option is to work your way up the qualifications ladder with a VET course or with single-degree subjects.

Entry requirements into VET

Students usually need to have reached a level of study equivalent to Year 10, 11 or 12. Higher entry requirements may apply to undergraduate degrees offered at TAFE institutes. Some courses may have prerequisite subjects or work experience requirements, while others — such as art and design — may require submission of a portfolio.

Adam

Advanced Diploma of Marketing, Bachelor of Business (Marketing)
TAFE SA and University of South Australia Business School

I chose to pursue TAFE study as I was still deciding on a career path — I felt it would give me the opportunity to explore my chosen career in more detail. I found TAFE to be a more mature approach to learning and development than high school education, as it helped me recognise my strengths and highlight areas I needed to improve.

TAFE is a great bridge between school and university as it develops the analytical, comprehension and learning skills required to transition into university comfortably.

Abbie

Certificate III in Children's Services, Diploma of Children's Services and Bachelor of Education
Holmesglen Institute and Swinburne University

I chose TAFE because my ATAR was too low to get into the degree straight away. For me, TAFE was a lifesaver. Once I was studying, it gave me great insight into education and provided a casual learning environment where help was always available. TAFE enables you to develop the necessary skills for being at uni.

There were also plenty of placements, which meant I gained hands-on experience in the industry. The placements provided me with my first full-time job — even before finishing my degree, I'm getting valuable, first-hand experience.

Student equity

Equity refers to equal access and outcomes for students who have traditionally been under-represented at university.

The Higher Education Participation and Partnerships Program (HEPPP) aims to ensure that Australians from low socioeconomic backgrounds can study at university. It provides funding that allows universities to improve access to courses and retain students.

As of 2021, the HEPPP has been refocused to support students who are:

- from regional or remote Australia
- Aboriginal and/or Torres Strait Islander
- from low socioeconomic status (SES) backgrounds.

This is part of the Job-ready Graduates Package, which provides more opportunities for regional Australia.

Outreach schemes

Many institutions offer schemes that encourage members of the community to consider higher education, often targeting prospective students who attend selected partner schools or who live in regional or low socioeconomic areas. Outreach schemes may include school visits, community events, workshops or classes on the institution's campus, immersion camps, special entry schemes, support programs and scholarship opportunities.

Scholarships

A range of equity and access scholarships are available through the federal government as well as from individual institutions and other organisations. Some scholarships are automatically offered to eligible students through Services Australia — visit **servicesaustralia.gov.au**.

Entry schemes

Many higher education providers offer alternative entry schemes for disadvantaged students. These allow students to gain access to courses via non-traditional pathways. This may involve completing a bridging or foundation program designed for students who have experienced educational disadvantage or who lack the formal qualifications to enter their preferred course.

There are also special entry schemes that give disadvantaged students special consideration or add bonus points to their ATAR, including students who have faced difficulty during secondary school or who have attended a school with typically low tertiary study participation.

Assistance while you are studying

Many higher education providers have general learning skill units available for all students, as well as academic support programs tailored to students from the various equity groups. They run seminars on topics such as essay writing, exam preparation, academic English, and study and organisational skills. Indigenous support centres are in place at many institutions and aim to support Indigenous students — both academically and socially — as well as to further develop Indigenous academic studies and provide an Indigenous presence on campus.

Students with disabilities can also expect equal access to all parts of university life. Many institutions have disability liaison officers or teams that organise specialised equipment, note-takers, volunteer readers and peer support networks.

Paying for your course

How much will your university course cost and how will you pay for it? There are two types of places: Commonwealth Supported Place (CSP), which is subsidised by the government, and full fee. Public universities offer CSPs to domestic undergraduate students, while private institutions tend to offer only full-fee places or a few CSP places in priority areas.

Tuition fees

Commonwealth Supported Place (CSP)

If you are a CSP student, the cost of your course is based on the discipline you study, which are grouped into four 'bands'.

The table on the following page indicates the 2023 CSP contribution range for each band per equivalent full-time student load (EFTSL).

The figures are applicable to students commencing study in the 2023 academic year. For more information, visit **www.studyassist.gov.au/help-loans-commonwealth-supported-places-csps/student-contribution-amounts.**

If your course includes subjects from a higher or lower band (and many do), those subjects will be charged at a different rate. Keep in mind that the rates are flexible, which means that not all universities charge the maximum. Try to get as much information as possible about course costs before you start. Please note that fees published here are indicative only.

Full-fee places

Private higher education providers offer full-fee places, with CSPs only available in certain priority fields, such as education and health. TAFE institutes may also charge full fees for higher education courses. Unlike CSPs, full-fee places are not capped and differ between institutions, so you will need to check with individual providers to determine fee structures.

To help cover these upfront tuition costs, an increasing number of private providers now offer deferred government loans.

Covering your tuition costs

There are several loan schemes to help students pay for tuition and other higher education costs. Through these loan schemes, students can defer the payment of these fees until their income reaches the minimum repayment threshold ($51,550 for the 2023—24 fiscal year). Payments are made through the taxation system, with employers deducting the required amount from your paycheck. Discounts may be available if you pay some or all your tuition fees or CSP contributions as you go.

HECS-HELP and FEE-HELP

CSP students have access to HECS-HELP, a government loan scheme that enables you to defer payment of your student contributions.

To help cover their full-fee tuition costs, students in approved courses at eligible higher education providers can access a similar government loan scheme called FEE-HELP.

The main difference between FEE-HELP and HECS-HELP is that the course fees covered by FEE-HELP are not set within ranges stipulated by the government, but are decided at each institution's discretion. With FEE-HELP, there is also a limit on how much students can borrow, which is indexed annually.

In 2023, the maximum loan limit was $113,028 (or $162,336 for certain approved medicine, dentistry, veterinary science and aviation courses). Some courses cost more than these amounts. A loan fee of 20 per cent, which is not included in the FEE-HELP limit, applies to FEE-HELP loans taken out for most undergraduate courses.

Other loan schemes

Undergraduate students can also access the SA-HELP loan scheme to cover the annual student services and amenities fee, which was set at a maximum of $326 in 2023. OS-HELP assists undergraduate CSP students with the costs of an approved overseas study experience (up to a maximum of $7,348 for a six-month study period or $8,817 if studying in Asia).

All fee and loan information is correct at the date of publication (August 2023). Visit the federal government's Study Assist website at **www.studyassist.gov.au** for the latest information.

	Fields of study	Student contribution ranges
1	Agriculture, English, mathematics, education, postgraduate clinical psychology, Indigenous and foreign languages, nursing, statistics	$0–$4,124
2	Allied health, other health, built environment, computing, engineering, surveying, science, environmental studies, pathology, visual and performing arts, professional pathway psychology, professional pathway social work	$0–$8,301
3	Dentistry, medicine, veterinary science	$0–$11,800
4	Law, accounting, administration, economics, commerce, communications, society and culture	$0–$15,142

Other costs to consider

Course-related expenses

University can be expensive. Outside of tuition costs, textbooks and study materials can take a big chunk out of your budget. While some humanities subjects may only require a photocopied reading dossier that you can pick up for $30 at the university bookshop, some science, health and technology textbooks can set you back several hundred dollars.

Students studying fine art and other more hands-on courses will also need specialised equipment and supplies.

Living costs

Unless you're living within walking distance of your campus, you'll also need to pay for transport. This could mean anything from a concession transport smartcard to a car with registration, insurance and fuel. You might also need to buy a permit to park on campus. If you drive, think about carpooling with other students who live near you. If you're moving out of home you will also have to consider expenses such as rent, utilities and groceries.

Financial help and scholarships

Government allowances

There are various financial assistance schemes available through Services Australia, providing allowances to diverse groups of students such as Austudy, ABSTUDY and Youth Allowance. If you're renting, you may also be eligible for Rent Assistance payments, which provide you with a contribution towards your rental payments.

For more information, visit the Services Australia website at **www.servicesaustralia.gov.au**.

Scholarships

There are three ways to get a scholarship: from the federal government, your education provider, or private organisations such as philanthropic societies, special interest groups and corporations. Each of these groups might provide funds to financially disadvantaged students, high achievers, students in a specific course or those from a specific region — the list of criteria is endless.

Thousands of scholarships are available to Australian undergraduate students covering tuition fees, living expenses, accommodation costs or even the whole lot if you're lucky.

Check out **www.gooduniversitiesguide.com.au** for more details and use the scholarships search tool.

Federal government scholarships

One of the main sources of scholarships for commencing students is the federal government, which assists students who have experienced disadvantage. For more information, visit **www.servicesaustralia.gov.au** and **www.dese.gov.au**.

Student Start-up Loans

Student Start-up Loans are available to all full-time higher education students studying an approved course who are receiving Youth Allowance, Austudy or ABSTUDY. There are two loan periods each year, with students eligible for $1,201 per loan period in 2023.

The loan is repaid through the taxation system once students begin earning above the repayment threshold ($51,550 for the 2023—24 fiscal year).

Relocation scholarships

Relocation scholarships are paid to eligible dependent Youth Allowance and ABSTUDY Living Allowance students who need to live away from home to undertake full-time study in an approved course.

In 2023, this scholarship provides eligible students from regional and remote areas with:

- a lump-sum payment of $5,080 in the first year they moved away from home to study
- $2,541 in each of the second and third years of study
- $1,269 in each of the fourth and subsequent years.

If your family home isn't in a regional or remote area but your course is, you may be eligible for a scholarship. In 2023, the amounts are:

- a payment of $5,080 in the first year they moved away from home to study
- $1,269 for each subsequent year.

Commonwealth Scholarships Program

The Commonwealth Scholarships Program assists Aboriginal and Torres Strait Islander students from low socioeconomic backgrounds — particularly those from rural and regional areas — with higher education costs. There is a range of scholarships available, covering both education and accommodation costs.

Education provider scholarships

Most education providers fund a variety of scholarships. Many of these are awarded purely due to academic merit, but others are awarded to students who have experienced financial or educational disadvantage on an equity basis. Other scholarships may be awarded to students who study specific fields, live in the local area or show community involvement. Scholarships may be university-wide or faculty-specific, so it is worth looking at the full range offered by your preferred institution.

Getting the most out of your money

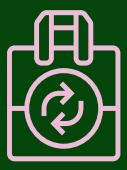
Living on a student income isn't impossible, so long as you exercise a little self-restraint and learn to keep to a budget. Keep the following tips in mind and you'll find the next few years a little easier to manage.

Set a budget

Understanding your income and expenses is the most important part of staying on track financially. Include every expected expense (rent, transport, groceries and utilities), set aside an amount for emergencies and unexpected bills, and save a little money for leisure.

Cook at home

It's tempting to just pick up a takeaway on the way home (which helps when assignments are piling up), but it's an expensive way to eat and you'll find your funds dwindling quickly. Learn to cook a few simple meals at home, bring your own lunch to uni, check out what can be frozen and you'll end up with more money to spend doing the things you enjoy.



Buy secondhand

Textbooks and furniture are often used for a year and then sold when students go back home for the summer. To find some bargains, scope out Facebook marketplace, websites such as **studentvip.com.au** and student notice boards at your place of study.

Use your student card

One of the best things about being a student is the range of discounts. Movies, events, public transport and even some retail outlets offer concessions for students. Get your card out and start saving!

Supporting your studies

Working while you study

Many students are eligible for a scholarship or some form of government assistance, but for most this won't be enough to cover daily expenses. Most students work part-time or casually while they're studying. A few shifts a week at a supermarket or bar can provide a mental break, new social circle and funding for the occasional night out. Many institutions offer on-campus jobs for students, so this might be a good place to start your search. Some lucky students may even find a position related to their degree, giving them invaluable real-world experience.

On the downside, part-time work can eat into precious leisure time, affect your grades and create stresses of its own. If you can, the three-month summer break is a good opportunity to work more and save money for the year ahead.

Seek financial assistance

Take the time to research what your university can offer you and make the most of the services and discounts available. You can even get help putting together a budget, which will be helpful as the year goes on.

Financial counsellors are available to discuss your options with you, and some services or student unions provide emergency loans to get you through a crisis. If things are dire, you may be able to take out a bank loan (some of which feature deferred payments, which means you won't have to pay the money back until you graduate), borrow money from family, pick up an extra part-time job or defer for a semester or two to replenish your savings.

More information

Most institutions have a student finances service that can offer advice on budgeting and explain how to access loans and government assistance. You can also find tips about budgeting, student finances and consumer rights at **www.moneysmart.gov.au.**

Starting your course right

Before your first lecture

The first few weeks of adaptation can be stressful, so it helps to be organised. Consider taking a trial public transport run, sourcing subject outlines or purchasing your textbooks in advance. Familiarise yourself with your student email and any online portals of communication tools used in your course.

The more settled in you get before your course starts, the more likely you are to be enthusiastic about your course and motivated to do well academically.

Getting involved in O Week

Short for Orientation Week, O Week is a week of fun activities designed to help you ease into uni life, blow off some steam and make friends before classes start. Institutions usually offer a range of activities, from scavenger hunts, sporting activities and pub crawls to information sessions and campus tours.

Learn about your class type

The type of course you're doing will determine how your classes are set up. If you're an arts student, for example, your lectures will generally be made up of 100 or more students, but there may only be 15 to 20 students in your tutorials. Labs are more common in hands-on courses such as health and engineering.

Remember that class interaction often forms a part of your course mark, so don't be afraid to speak up and ask questions if you don't understand something.

Get organised

Many new students underestimate the time involved studying and completing assignments outside of class. Even if you don't have many contact hours, you're still expected to maintain an independent study schedule, keep up with your readings before each class, research, write essays and prepare for exams. Begin your assignments as soon as you get them and maintain a study schedule or diary.

If you don't like your course

Once you've settled into student life, your course should still be interesting. If it's not, it could just be first-year jitters, but consider whether your course is meeting your expectations. Many courses also start with introductory subjects that are tedious. But if you are really starting to doubt that things will pick up, listen to your instincts and explore your options.

It is not uncommon for students to find that the course is different to what they expected, even after a thorough research sometimes. Most students don't drop out completely, but adjust their course to suit their interests. If it is just a couple of subjects that you don't like, you can usually change your enrolment quite easily. You must make all your course changes before the census date or you risk having to pay for the units you drop and receiving a fail grade.

Course transfers are more complicated and are restricted to certain times of the year, but they are possible. Students who transfer to another course or institution may be able to gain credit for completed subjects.

Getting help and support

At times during your degree, you may feel that you need some extra help. You might be struggling with a subject or have a problem with a lecturer. It may even be something unrelated to your studies — something more personal. Whatever the issue, there is always someone to help.

Academic services

If you need some help to succeed in your studies, there are a range of services available. Learning support programs vary between campuses but may include sessions or help on:

- computer literacy
- study skills
- essay writing
- exam preparation
- English language.

Personal issues

Problems can often arise with a lot of change. School leavers are especially at risk because everything tends to change at once — friends, teaching style and living arrangements. Mature-age students returning to study often have the same kind of culture shock and may find it tough getting into the rhythm of study and having less leisure and family time. Some students have issues in their personal lives that cause them to struggle with their studies. Whatever the problem, most institutions provide qualified counsellors to help.

University policy

If you have a problem with university policy, most higher education providers have a student grievances policy that outlines the steps a student should take if they feel they have been unfairly treated. Grievances can relate to academic or administrative matters, or issues such as discrimination, bullying or sexual harassment. To find out more about your institution's policy, talk to your student advisery service or student ombudsman.

5 tips for student success

1. **Be positive and get involved**

Being a student isn't just about getting a diploma or degree. Embrace the new world you've stepped into — you'll probably miss it once you're in the workforce. Enjoy being on campus and take advantage of the societies and events that your university provides. This will ensure you have more memories than just the inside of lecture theatres.

2. **Set goals and plan a schedule**

Gone are the days where your high-school teachers chase you down for late work — it's all on you. Freedom can feel good, but it also means you need to take responsibility for getting your work completed. Use your calendar and enter all your due dates and extra-curricular events. Break up assignments into smaller goals to prevent all-nighters the day before they are due.

3. **Do more than the bare minimum**

Attend all your classes, keep up with the workload and don't leave assignments or exam study until the very last day. If you need to miss a class or don't think you can meet an assessment deadline, chat to your lecturer or tutor ahead of time so they can help.

4. **Seek support when you need it**

While you're expected to take control of your education, there is support available if you need it. Talk to your lecturers and tutors if you're struggling with the coursework. If you're experiencing personal issues, universities also have counsellors and support services on campus that are often free of charge for students.

5. **Allow yourself some down time**

Most undergraduate degrees are a minimum of three years and will feel even longer if you don't take some time out to recharge. Include time in your schedule to relax and enjoy life regularly, whether it's a night out with friends or other non-uni related activities.

Making the most of student life

1. **Talk to people**

You'll be mixing with people from a range of backgrounds and cultures, so take advantage of the diversity to broaden your horizons. Talk to people in tutorials and lectures, join clubs and societies, play sport and attend free events on campus.

2. **Engage with your learning**

Many universities offer short courses, common first-year electives, or breadth subjects that are required for all students regardless of discipline, giving you a chance to explore subjects outside of your degree and graduate with a well-rounded education and varied interests.

3. **Use your holidays**

Holidays are an opportunity to work and build some savings for the next semester, but the long break also presents an opportunity to spend a month or two travelling. If you've relocated to study, return home and spend time with family or take the opportunity to explore your new environment.

4. **Gain some industry experience**

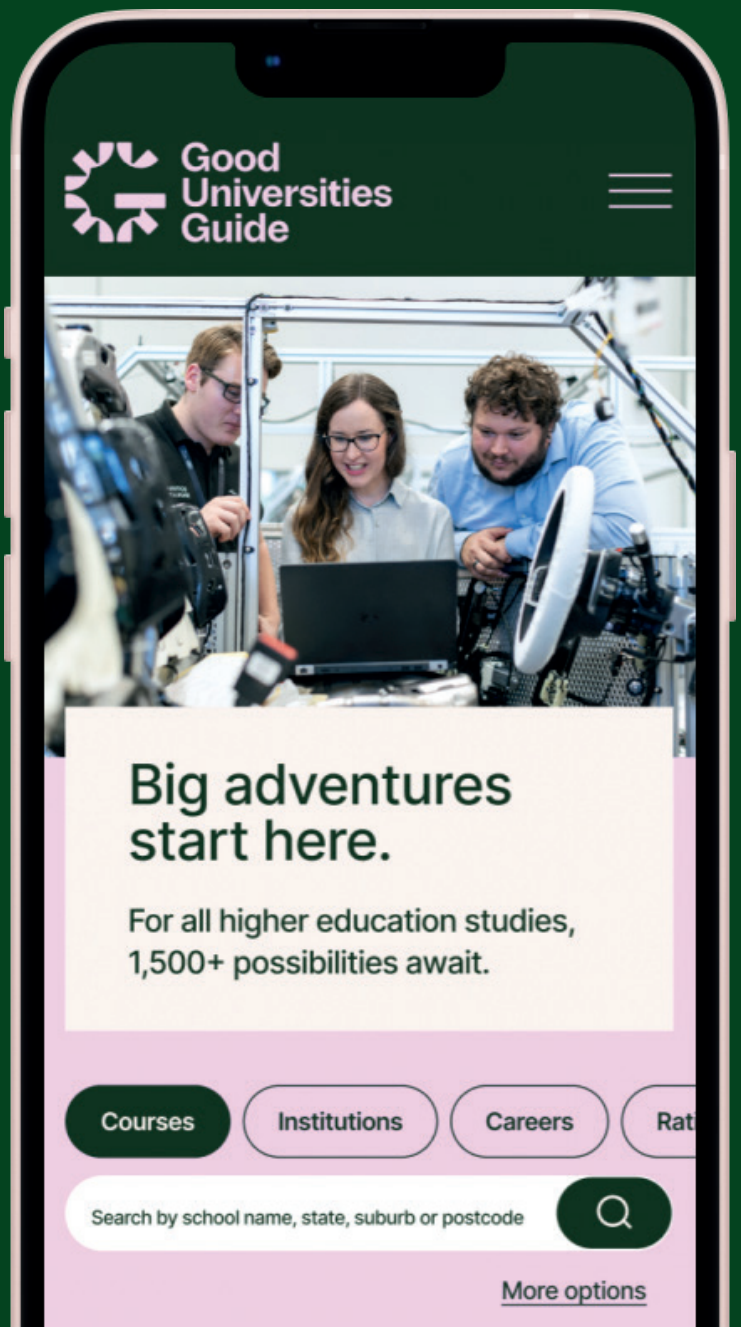
Enhance your studies by organising an internship early on in your degree. It can make all the difference when applying for jobs, and help determine if you're heading in the right direction.

5. **Start networking**

If you really want to hit the ground running once you have your degree, learn the value of making connections while you're still at uni. A range of networking opportunities are available for students, including job fairs and mentoring programs. You never know who might give you a helping hand when you're getting started in your industry!

Every course in Australia

Start comparing your options online



gooduniversitiesguide.com.au/course-provider

Section 2:

Ratings & rankings

How to use this section

This section provides a series of ratings and insights across a range of indicators. The ratings are grouped together under common themes.

These ratings and rankings give an overview only — make sure you undertake further careful research before choosing a course and campus. The rankings and ratings show that courses and institutions differ in many ways. Only you can decide which differences really matter to you.

The rating categories covered in this section are listed below.

Characteristics

- Social equity
- First generation
- Staff qualifications
- Student demand
- Student:teacher ratio
- International student progression score

Graduate outcomes

- Full-time employment
- Starting salary

The student experience

- Overall experience
- Skills development
- Student support
- Teaching quality
- Learner engagement
- Learning resources

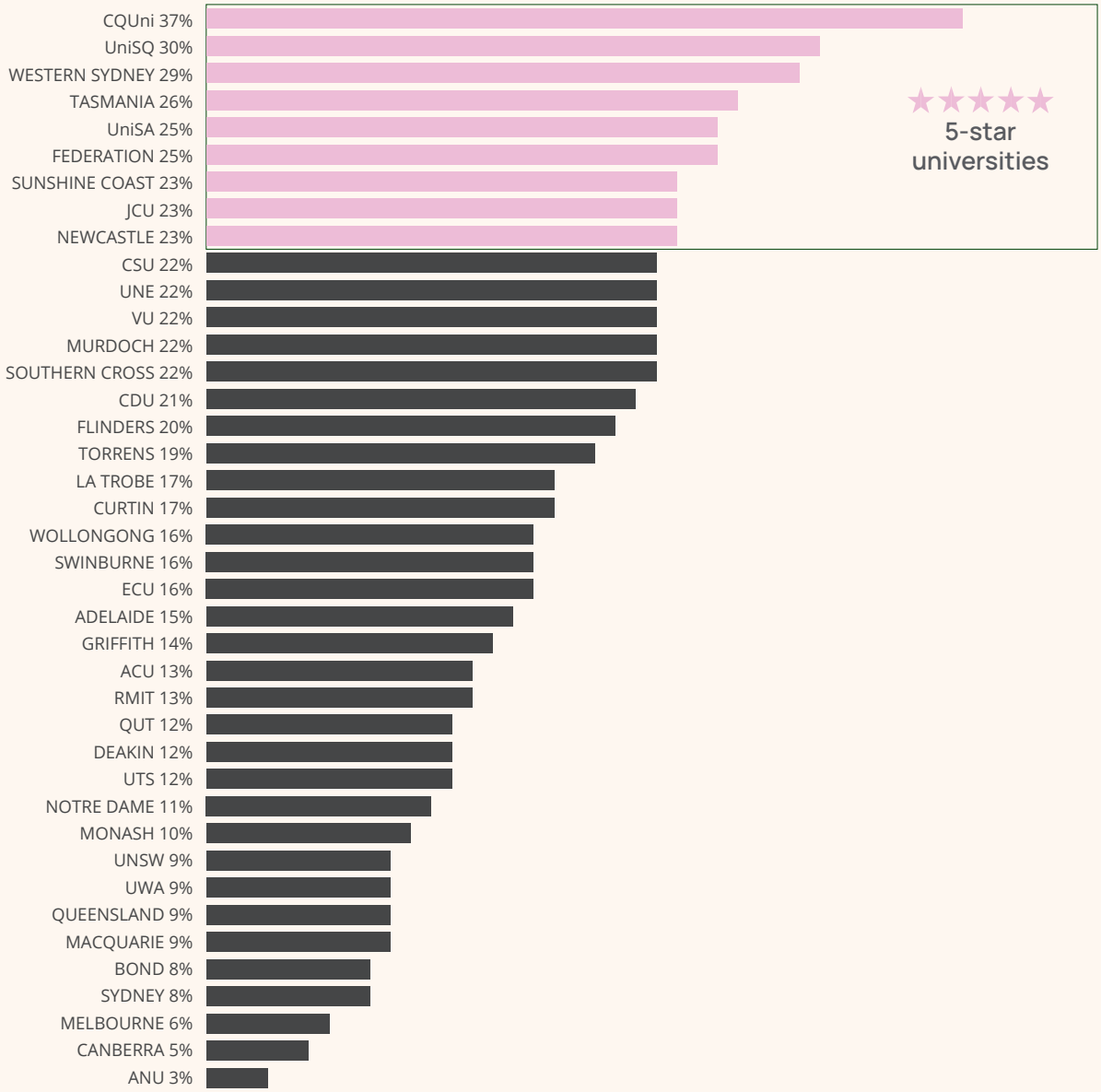
Social equity

All universities work to ensure that students who are typically under-represented in higher education are supported in their pursuit of a tertiary qualification. This rating shows the proportion of students in a university's entire cohort of domestic students who come from low socioeconomic or disadvantaged backgrounds.

A five-star rating means that the institution's proportion of commencing domestic students from a low socioeconomic background is high enough to put it in the top 20 per cent.

Students from low socioeconomic backgrounds are defined by the Department of Education, Skills and Employment 'Low SES (SA1 measure)(b,c)' category, which refers to a combination of factors that determine a student's social equity background, such as their home address and parents' occupation.

Numbers are from the Department of Education, Skills and Employment and refer to the 2021 enrolment year.

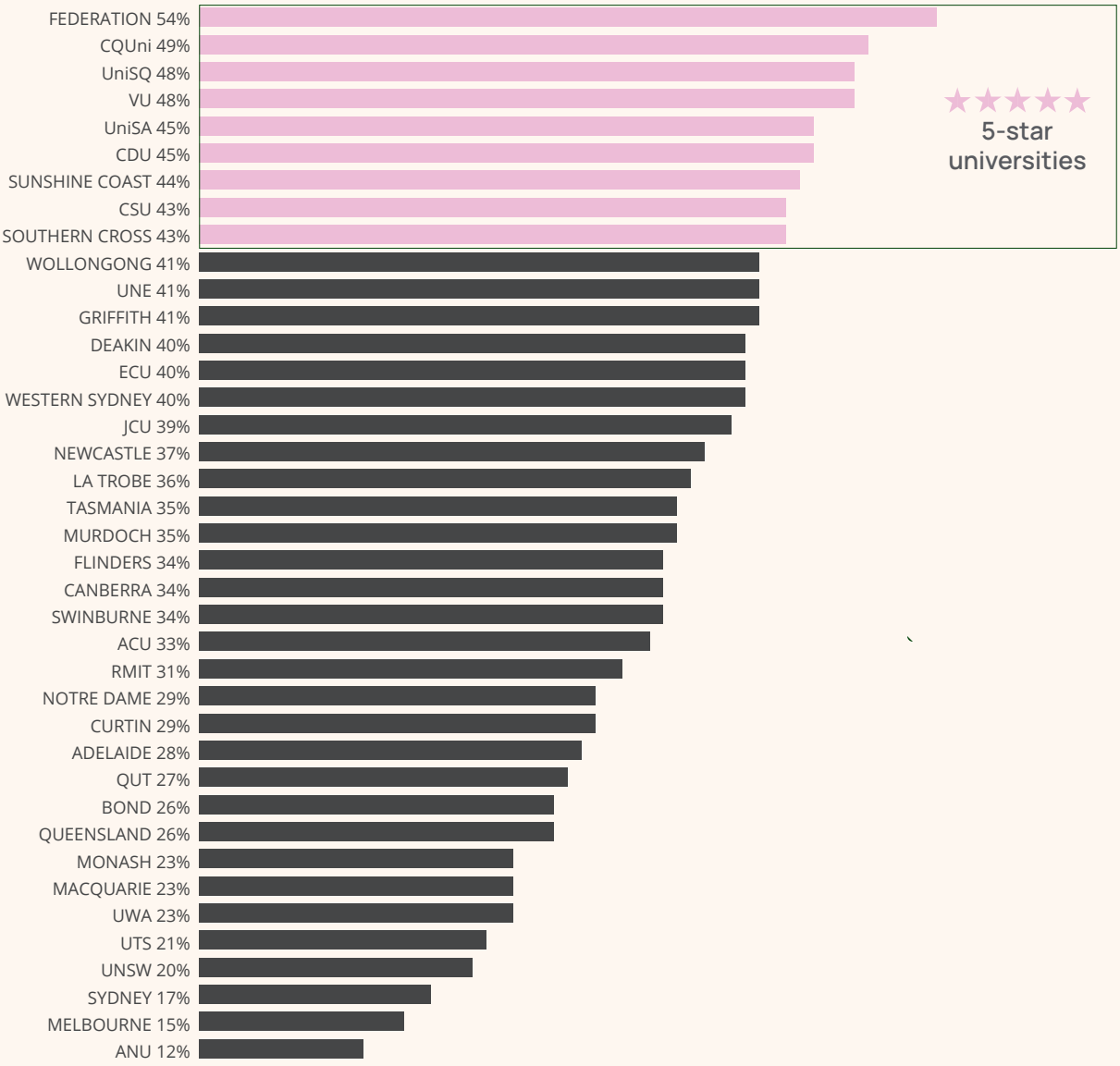


First generation

All universities are striving to make higher education more accessible to people from different backgrounds and circumstances. This rating looks at the proportion of domestic students commencing a bachelor degree, whose parents' education is known and did not exceed a vocational qualification. These students are the first in a generation to attend university, while many will be the first person in their whole family.

A five-star rating means that the proportion of commencing bachelor students who identify as the first in their family to attend university is comparatively high at one university to place it among the top 20 per cent of all universities.

This rating is based on a pooled dataset that covers domestic enrolment numbers from 2012 to 2021.

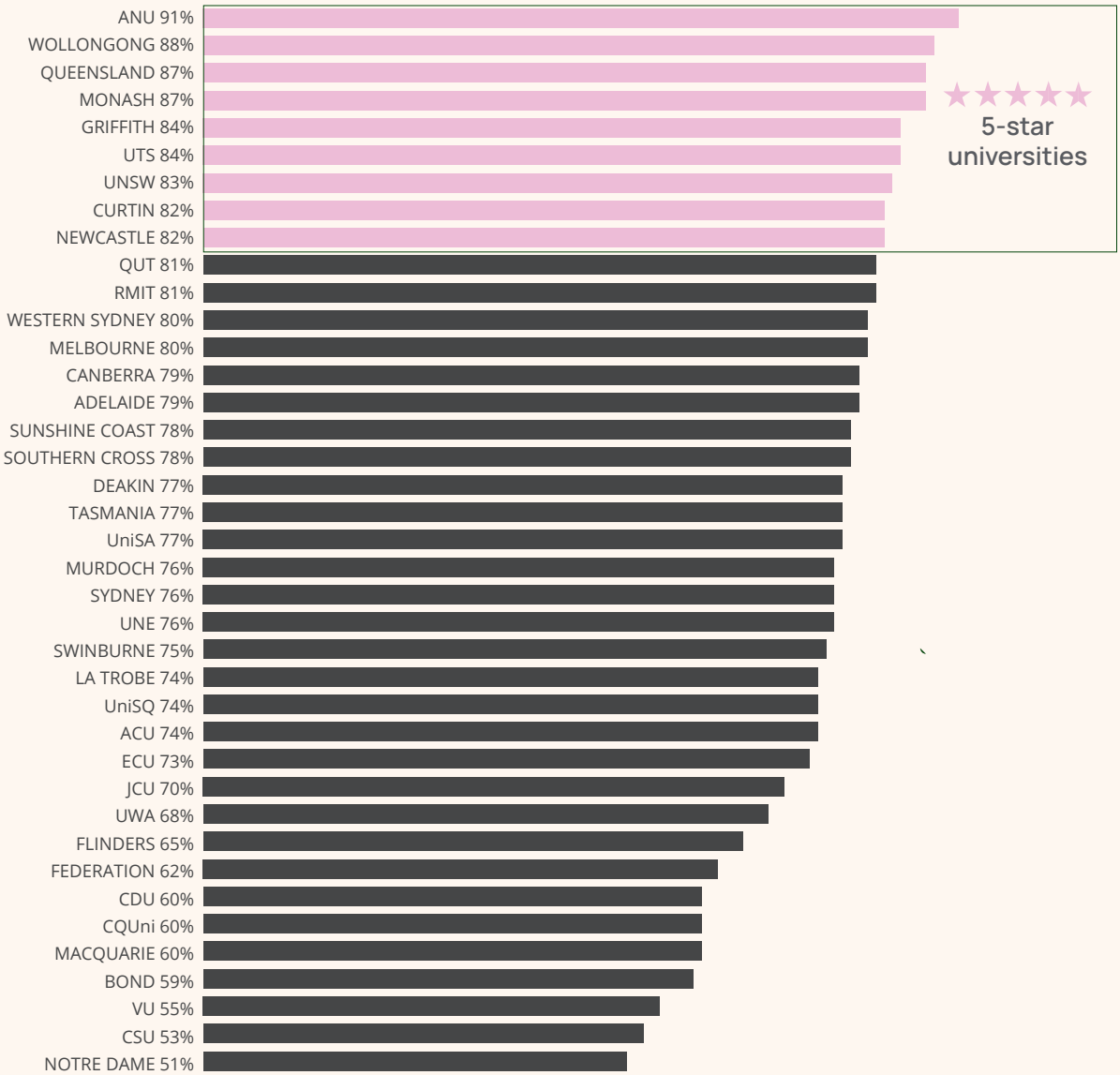


Staff qualifications

This rating looks at the proportion of academic staff who hold a PhD, doctorate by research or doctorate by coursework. There are highly qualified academics at every university, but it's important to consider other factors — we recommend comparing these results with out graduate employment outcome and our teaching quality ratings.

A five-star rating means the proportion of staff holding a doctoral degree is sufficient to put the institution in the top 20 per cent of all universities.

This rating is based on the 2020 full-time equivalent (FTE) of full-time and fractional full-time academic staff, as published by the Department of Education, Skills and Employment in 2022.



Student demand

Student demand is based on the premise that students with higher entrance scores have more options available to them than those with lower scores. If the former can theoretically go to any university, where are they choosing to go?

This rating is indicative of school-leavers who were enrolled based on entrance score only. It does not reflect demand from other types of commencing students, such as those with VET qualifications.

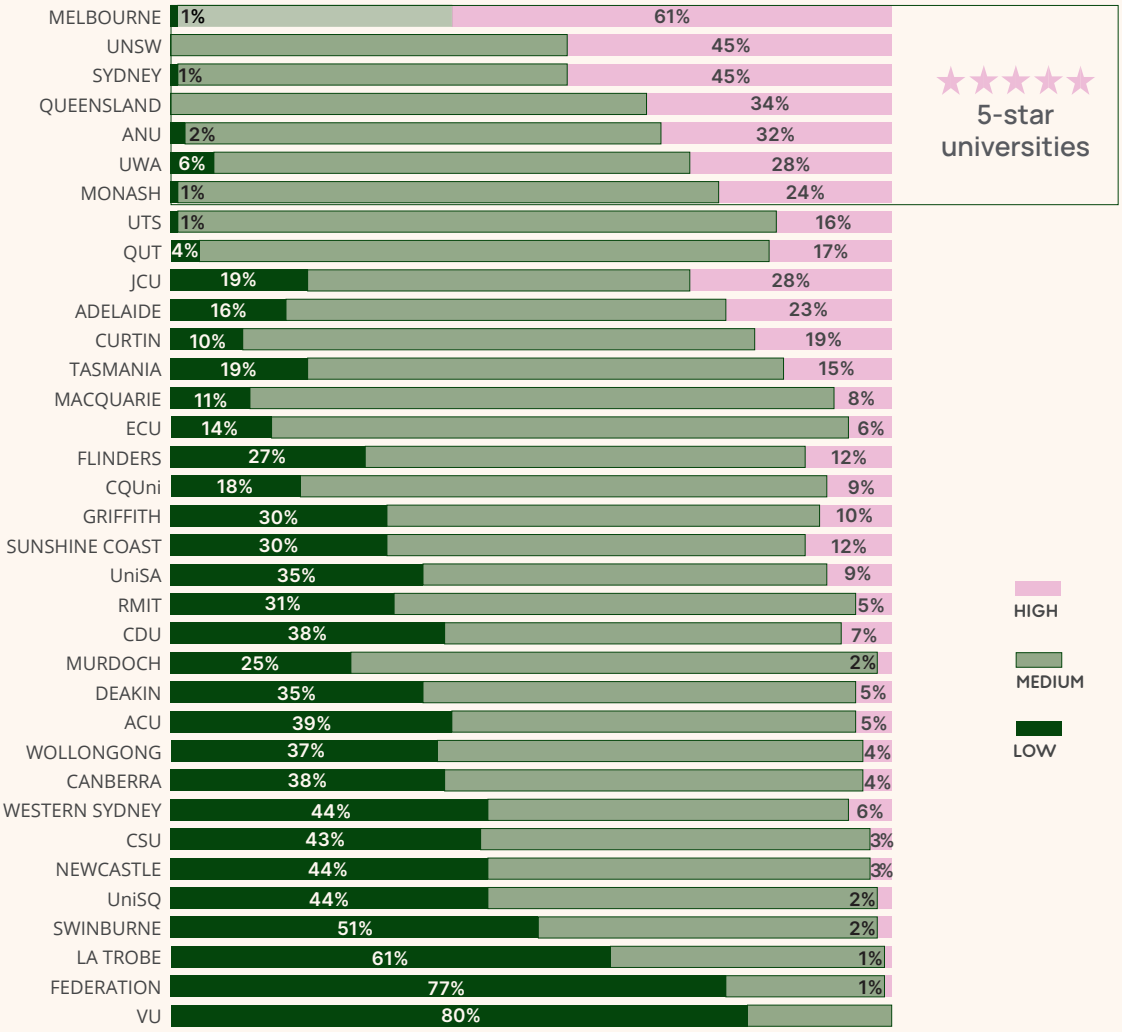
In the chart below, high scores comprise the top 20 per cent of scores in Australia, medium scores refer to the middle 60 per cent, while low scores are in the bottom 20 per cent.

This rating is based on the mean decile ATAR of commencing students at each university in 2021.

Using the University of Melbourne as an example, this table represents scores achieved by all the students who commenced a bachelor degree in 2020. We have separated them into 10 increments, where the top 10 per cent of scores achieved comprise the first decile, the next 10 per cent the second decile, and so on.

To achieve the ratings and determine the five-star universities, each decile is given a weighted score. A university that enrols more students with scores in the top deciles will achieve a higher weighted score.

Fifty-five per cent of students who commenced a bachelor degree at the University of Melbourne had scores in the top two deciles, therefore it's considered to be in higher demand than other universities.



Student:teacher ratio

This rating looks at the number of students per teacher. A five-star rating means a university is in the lowest 20 per cent for student:teacher ratio, which indicates comparatively fewer students per teacher.

Please note that shared teaching arrangements between universities and partner organisations can influence these ratios.

This rating is based on data for 2021 full-time equivalent teaching academic staff (including casual staff) and equivalent full-time onshore student enrolments.

20:1 or less

★★★★★

5-star universities

BOND
ANU
SYDNEY
SWINBURNE
JCU
MELBOURNE
UWA
MURDOCH
FEDERATION

More than 20:1

TASMANIA
UniSQ
WOLLONGONG
QUT
MONASH
ADELAIDE
UTS
UNSW
RMIT
LA TROBE
SUNSHINE COAST
QUEENSLAND
CANBERRA
UniSA
NOTRE DAME

25:1 or more

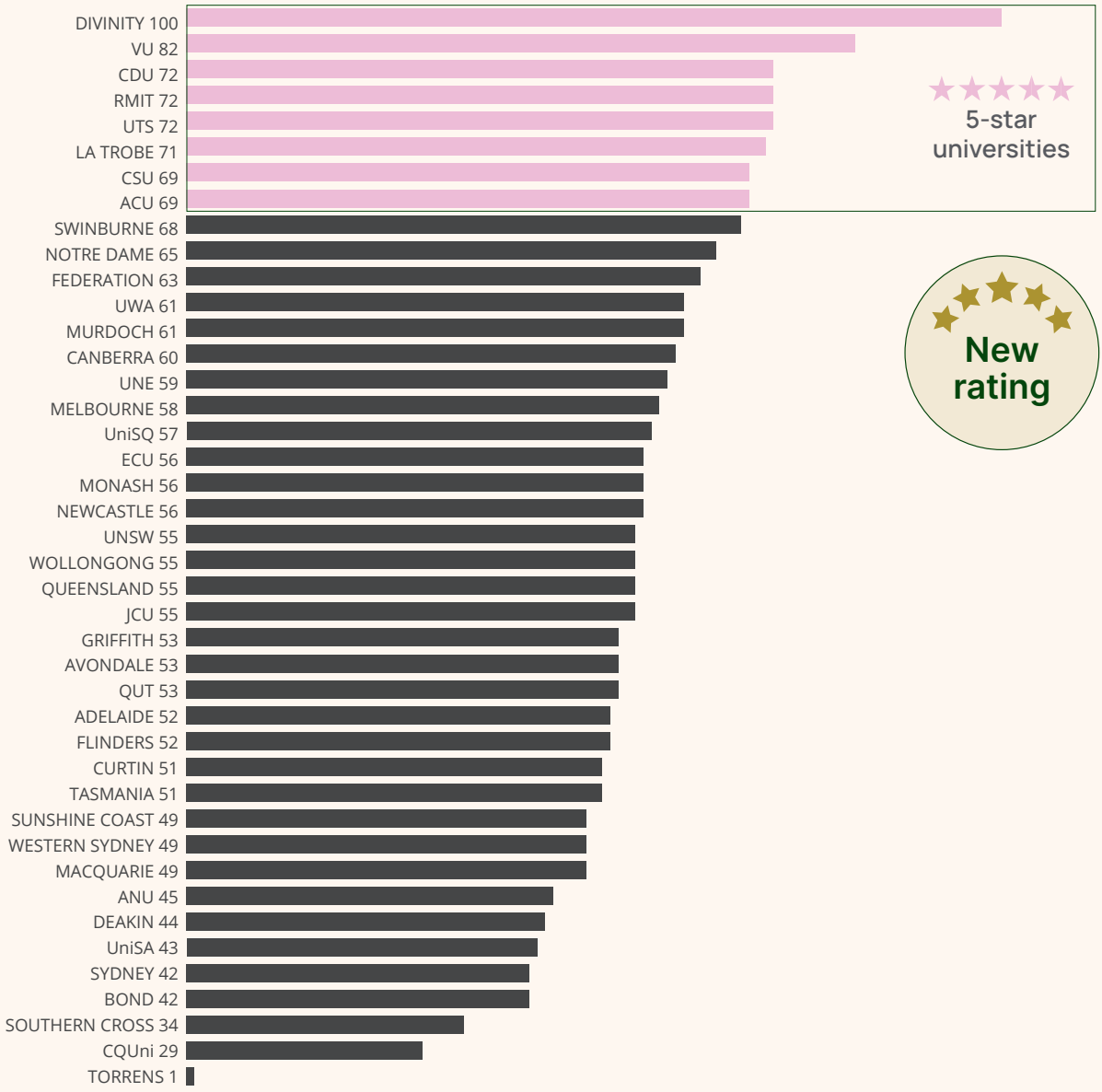
MACQUARIE
CURTIN
CSU
NEWCASTLE
DEAKIN
UNE
SOUTHERN CROSS
GRIFFITH
WESTERN SYDNEY
ACU
ECU
VU
CDU

International student progression score

This rating measures the proportion of international students who successfully complete their subjects in the first year of study. International students' completion rates at each university are calculated by study mode (on- and off-campus) and compared with the national average rate of completion for international students studying in the same mode. A weighted average is calculated for each university, and results are expressed as a score from 1 to 100. A high score indicates that students are completing subjects in their first year of study at a higher rate than the national average for their student equivalent. Five stars are awarded to the top 20 per cent of universities.

Institution's reputation and graduate employment outcomes are often cited as international students' primary considerations for selecting a course. The international student progression score provides a deeper insight into the international student experience, by examining their success in completing subjects within their first year of study. Weighing results by study mode helps ensure a like-for-like comparison between institutions. Many other factors, such as field of study or campus location, can also contribute to international students' first-year success.

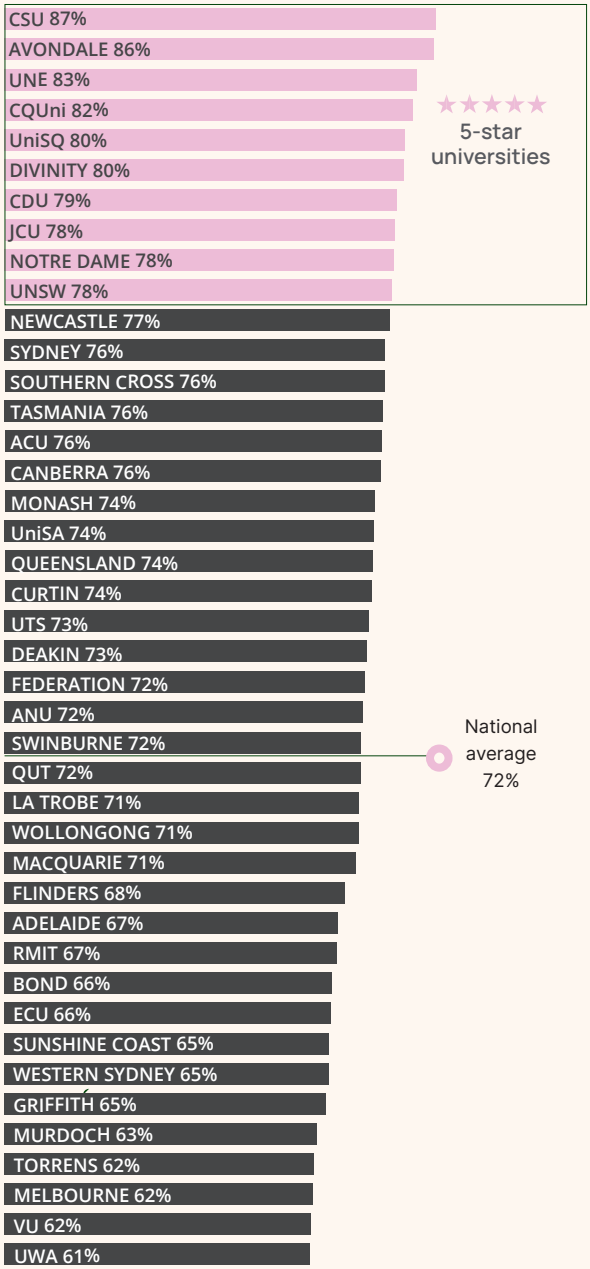
Data is sourced from the Department of Education, Skills and Employment. It refers to full-fee paying international students who commenced a bachelor degree in 2021.



Graduate outcomes

Full-time employment

This rating looks at the proportion of graduates who were employed full-time four months after completing their courses. Data have been sourced from pooled results of the 2020, 2021 and 2022 Graduate Outcomes Surveys.



Starting salary

This rating compares the median salary of graduates from different universities. Figures refer to the 2017-2018 financial year and capture students who were employed full-time, part-time or underemployed one year post-graduation*.

The student experience

The ratings on the following pages compare the performance of universities across six student experience categories:

- Overall experience
- Skills development
- Student support
- Teaching quality
- Learner engagement
- Learning resources.

For each of these categories, institutions are awarded five stars if they fall within the top 20 per cent of all universities. Note that in cases where there are numerous universities with the same score, the proportion in the five-star category may exceed 20 per cent of the total university pool.

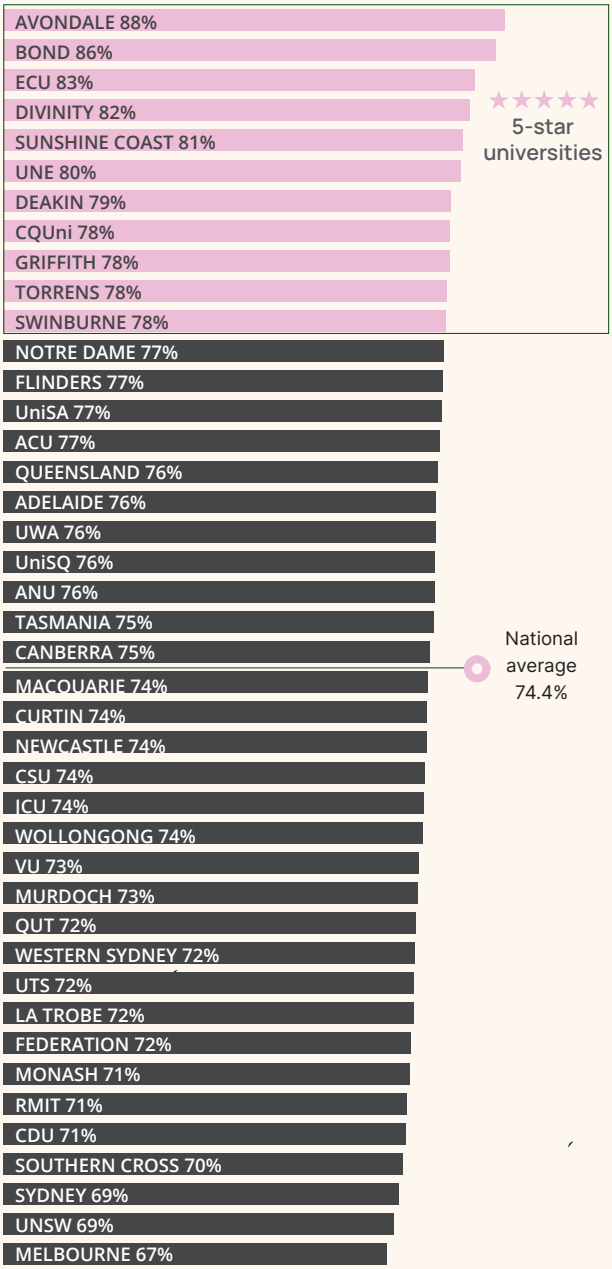
For each category, the percentage of students who were satisfied with the university's performance in the area is noted. For example, if a university achieves 75 per cent for teaching quality, this indicates that 75 per cent of students at the university were satisfied with the quality of teaching they experienced.

Data has been sourced from the Quality Indicators for Learning and Teaching (QILT) and is based on the results of the Student Experience Survey. Please note that the QILT website provides confidence intervals that reflect the accuracy of these estimated values, which have not been included in this Guide.

Our student experience data has been sourced from the 2021 and 2022 Student Experience Surveys.

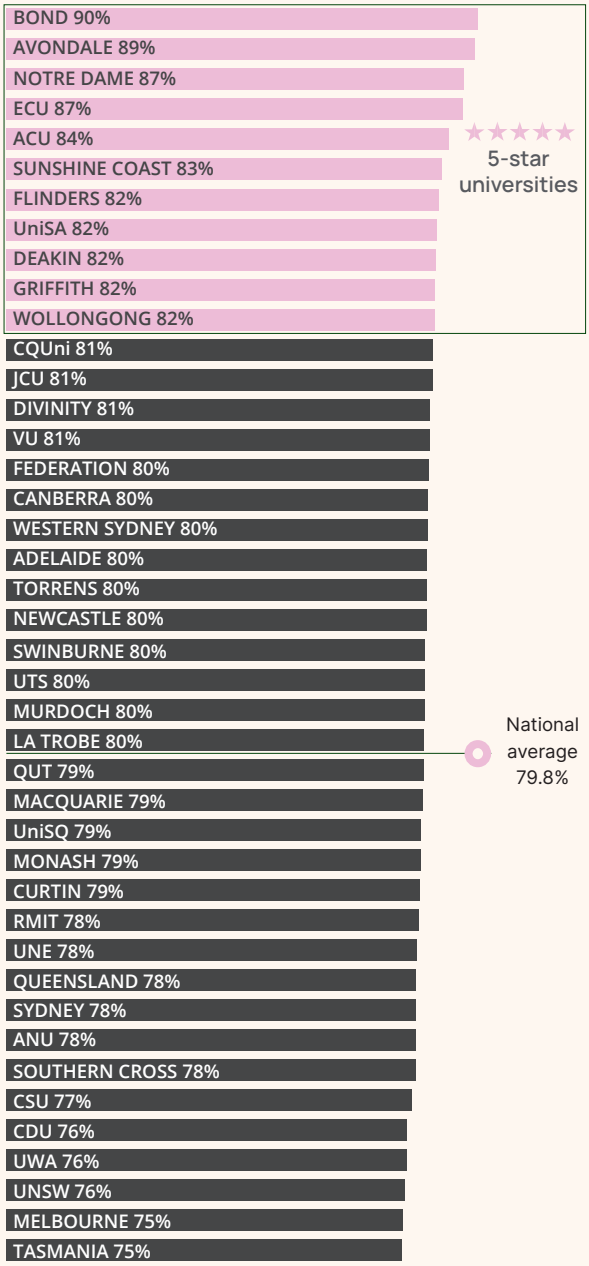
Overall experience

This rating looks at the proportion of students who were satisfied with the overall quality of their educational experience.



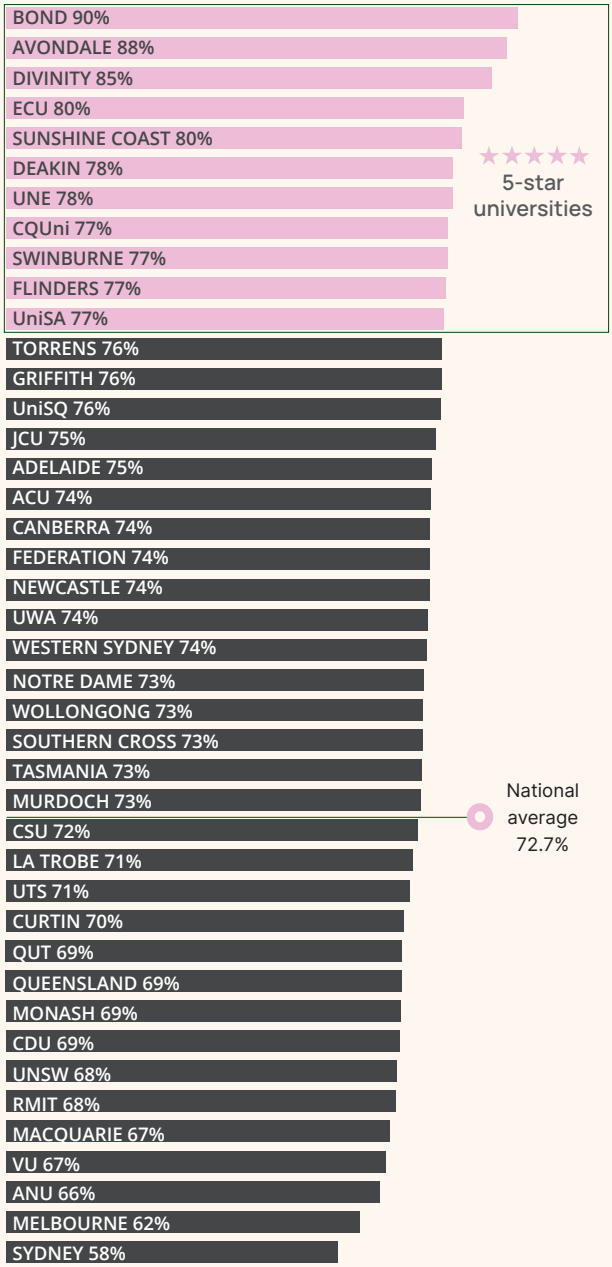
Skills development

This rating looks at the proportion of students who were satisfied with the skill development they experienced through their studies.



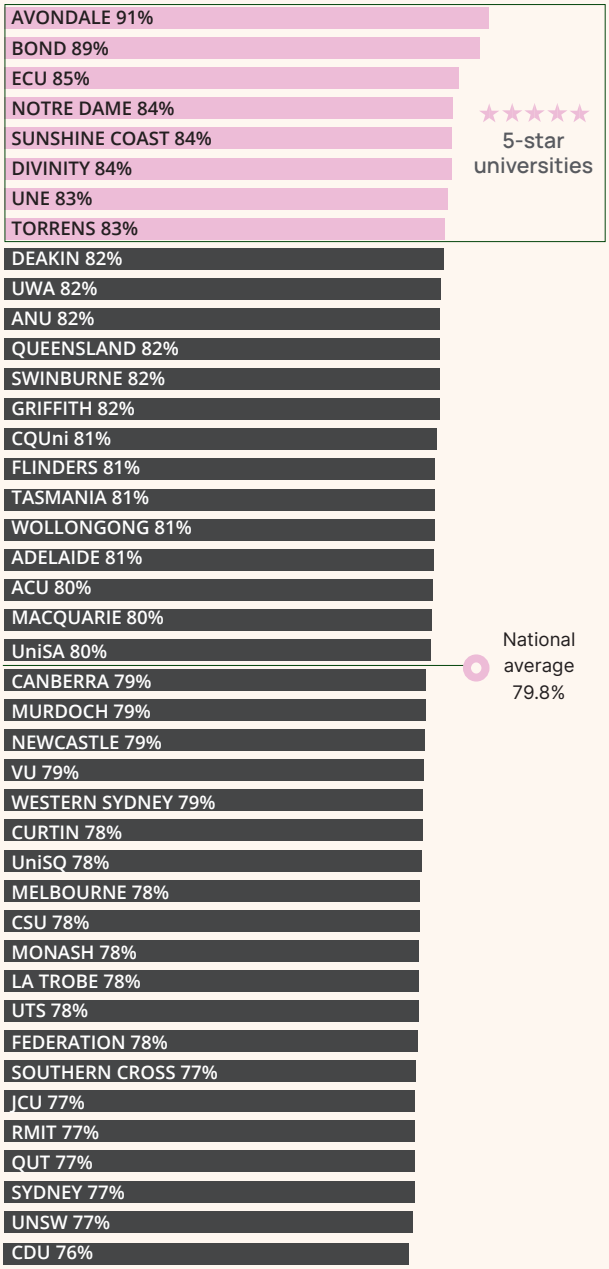
Student support

This rating looks at the proportion of students who were satisfied with the support they received from their respective institution.



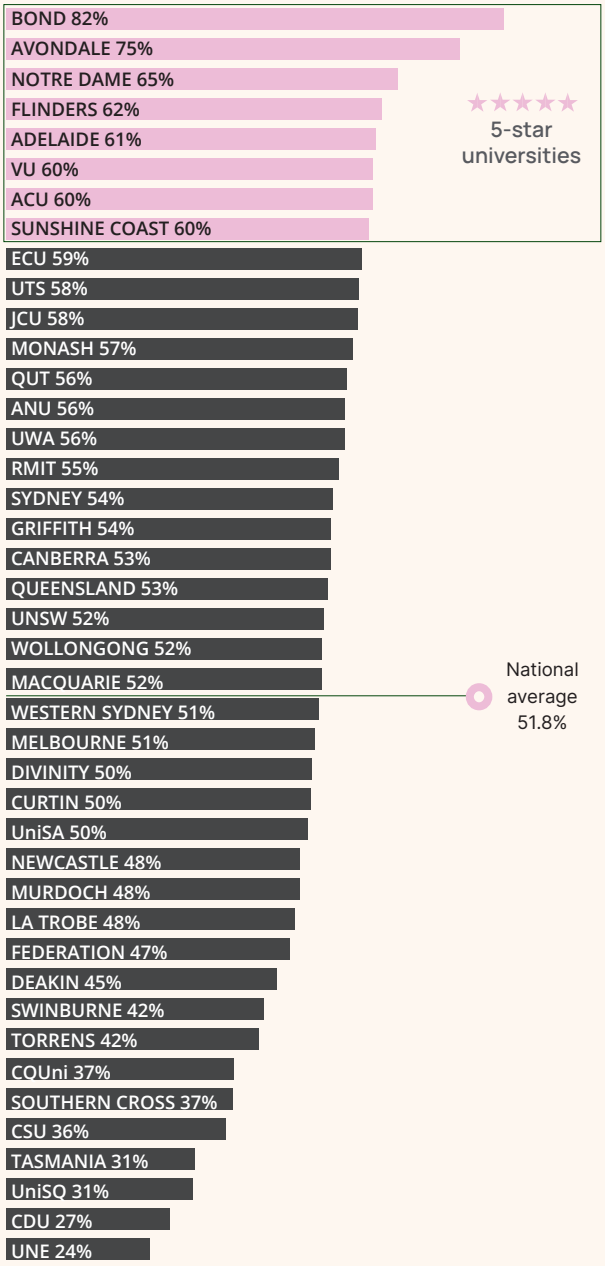
Teaching quality

This rating looks at the proportion of students who were satisfied with the quality of teaching they experienced.



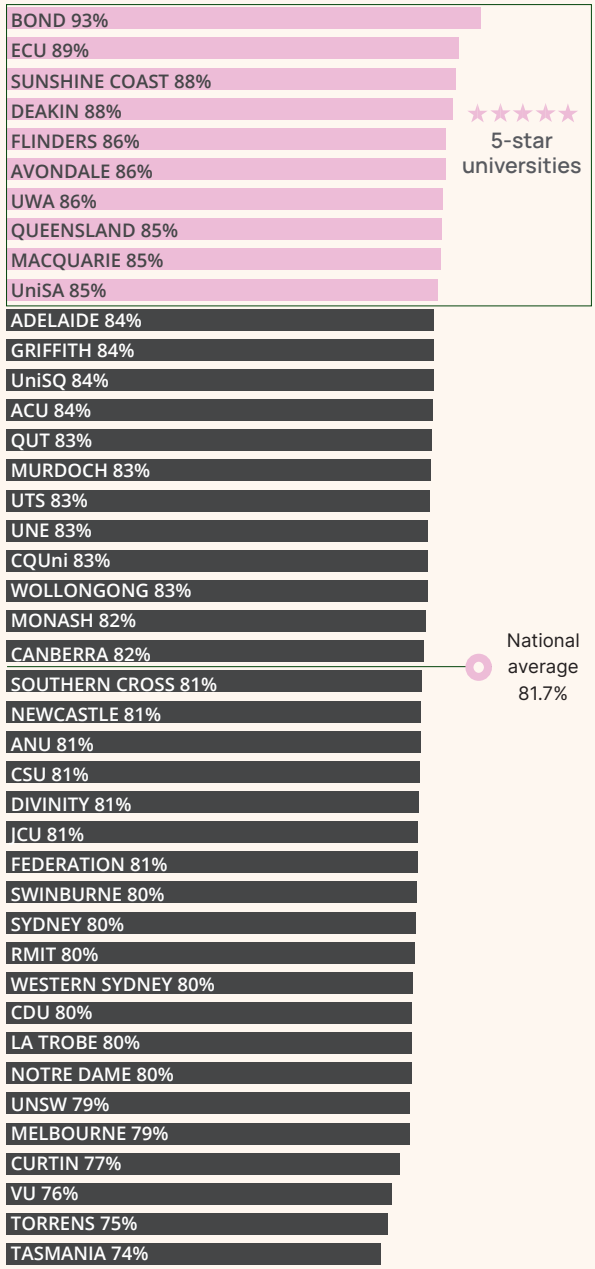
Learner engagement

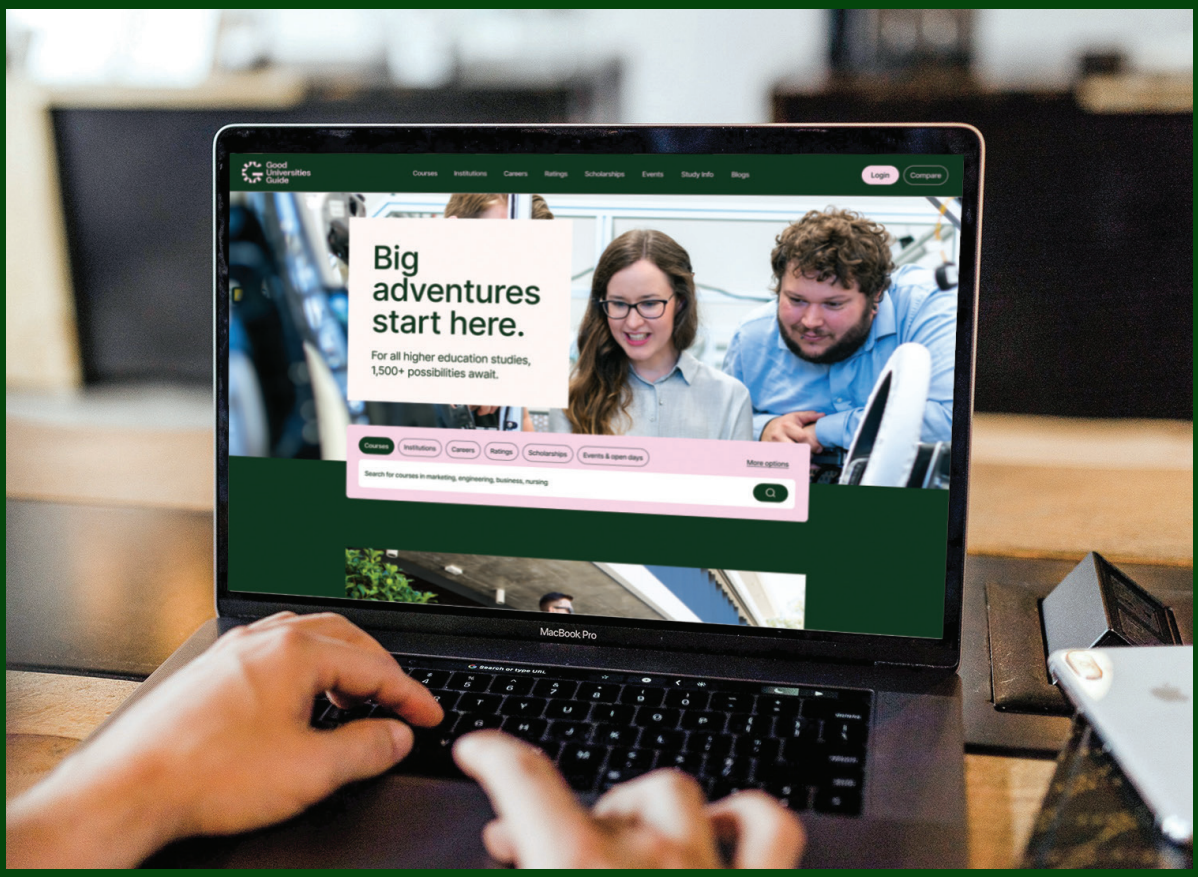
This rating looks at the proportion of students who rate their sense of belonging and involvement at their institution positively.



Learning resources

This rating looks at the proportion of students who were satisfied with the learning resources provided by their institution.





Everything you need to kick-start your future.

gooduniversities guide.com.au

Courses | Careers | Scholarships | Ratings

Section 3:

Where to study

Choosing where to study

While it can be difficult to choose a place to study, you will find that there are some key differences that can help you make the big decision. Regardless of whether you're looking at TAFE, university or a private college, the most important thing is to determine the character and focus of the institution. Ensure that it aligns with your personality, interests and goals.

Location

Study institutions can be found in both capital cities and regional cities. Most of Australia's capital cities provide the vibrant, cosmopolitan lifestyle and multicultural society that you would expect, but each has its own special character, charm and weather patterns.

Away from the hustle, bustle and excitement of the capital cities and their surrounding suburbs, you will find institutions in regional cities and country areas, which are known for their close communities and relaxed lifestyle. Here, life is a bit more slow-paced, and with fewer students, there is often a more personal touch on the campus compared with their big city equivalent.

Areas of academic strength

You should ensure that your field of study is a strong point of the institution you choose. If you're looking to attend a university, our ratings are an excellent place to start, and you can also research each university's strengths through their websites. Choosing to study somewhere that excels in your field of study may provide you with access to more specialised opportunities, and it's also likely that its cutting-edge research will filter through to your course, that you will be taught by prominent academics, and that there will be plenty of opportunities to undertake your own research.

Campus community

The sense of community at your place of study will impact your study experience, so you should ensure that it is one that you want to be part of. Most campuses also have a specific feel, whether it be cosmopolitan, academic, relaxed or energetic, so be sure that the atmosphere a good fit for your personality. Look out for on-campus services and facilities that cater to your personal interests. Whatever the size of the institution, you should make sure that the community feel is cohesive, with plenty of opportunities to meet other students across the faculties — through events, activities and shared facilities.

The institution's website can give you a glimpse of what the community might be like, but the best way to see whether it's the right fit for you is by visiting the campus, chatting to staff and students, and experiencing it for yourself.

Note: *This section provides a series of ratings and insights across a range of indicators. The ratings are grouped together under common themes. All institutions are given the opportunity to describe and highlight their distinctive features, ethos, facilities, resources, environment and campuses in greater detail and in their own words. These passages are paid for and may include the institution logo and selected photographs.*

Avondale UNIVERSITY

Campuses
NSW
Lake Macquarie
Sydney

Phone (02) 4980 2222

CRICOS 02731D
RTO 91191
TESQA PRV12015

Avondale University

avondale.edu.au

We are Australia's best-kept university secret: one of the newest but with a pioneering history, and now ranked number one by the people who matter — you.

We are one of Australia's newest universities but our history of providing quality higher education that improves lives goes back more than 125 years. While we may be smaller than other universities, we have a big reputation for quality education experience, with The Good Universities Guide and the federal government's QILT ranking recognising the excellence of our courses and graduates.

Top-ranking university

We teach exceptionally, not everything.

We want every student to have an exceptional experience. That's not just having a good time meeting other students, but also building experiences relevant to their future careers — with great lecturers and opportunities to learn on the job through work placements as part

of their degrees. Our staff members have a deep commitment to engaging with students and helping them discover and fulfil their potential.

We don't teach all courses but focus on delivering those where we are confident you will have the best experience. We are proud to provide high-level, individual teaching and support, with easy and regular access to lecturers and small class sizes, so you can get the most out of your study.

Rating highlights	88% Overall experience ★★★★★	75% Learner engagement ★★★★★	86% Learning resources ★★★★★	89% Skills development ★★★★★	91% Teaching quality ★★★★★

Avondale UNIVERSITY

Careers start here.

Australia's #1 Nursing Course*

At Avondale, we want every student to have an exceptional experience.

That's not just having a good time meeting other students, but also organised professional placements to build connections for your future career, and more!

Become a Registered Nurse >>

THE GOOD UNIVERSITIES GUIDE 2024 LEARNER ENGAGEMENT
THE GOOD UNIVERSITIES GUIDE 2024 LEARNING RESOURCES
THE GOOD UNIVERSITIES GUIDE 2024 OVERALL EXPERIENCE
THE GOOD UNIVERSITIES GUIDE 2024 SKILLS DEVELOPMENT
THE GOOD UNIVERSITIES GUIDE 2024 STARTING SALARY
THE GOOD UNIVERSITIES GUIDE 2024 STUDENT SUPPORT
THE GOOD UNIVERSITIES GUIDE 2024 TEACHING QUALITY

CRICOS provider No: 02731D RTO: 91191 TEQSA: PRIV12015 ABN: 53 108 186 401

Good Universities Guide 2024*

Charles Darwin University

cdu.edu.au

At Charles Darwin University (CDU), we believe it's the unique experiences, perspectives and opinions you bring that help make us the highly-ranked, connected university that we are.

As a sustainable, innovative and inclusive university, we are deeply engaged with and informed by Australia's First Nations people. We offer more than 300 degrees, diplomas, certificates and short courses, spanning health, law, education, engineering, environment, business, the arts, Indigenous Knowledge and more.

As a top Australian university for graduate employment outcomes, and a leader in online education, we want to welcome you to our flexible and supportive learning environment.

Whether you're looking to upskill with part-time online study while juggling work and family commitments, or prefer a face-to-face connection with a tight-knit campus community, you can enjoy the flexibility you need to succeed.

And when you join CDU, you'll be preparing for the real world of work and beyond, thanks to our innovative online learning platforms, practical placements, expert lecturers, strong industry links and 24/7 academic and personal support — available from anywhere.

At Charles Darwin University, you can find your future, no matter where you're from.

You make CDU.

CHARLES DARWIN UNIVERSITY AUSTRALIA

Campuses and centres

NT
Alice Springs
Casuarina
Darwin
Katherine
Nhulunbuy
Palmerston
Tennant Creek

QLD
Brisbane

NSW
Sydney

Phone 1800 061 963

CRICOS 00300K

Rating highlights	45% First generation ★★★★★	Top 20% International student progression ★★★★★	79% Graduate employment ★★★★★	$61,400 Starting salary ★★★★★

Curtin University

Curtin University

curtin.edu.au

Campuses

WA

Perth
Kalgoorlie

Global

Malaysia
Singapore
Dubai
Mauritius

Phone

1300 222 888

CRICOS 00301J

Gain your degree at an innovative global university. Curtin has an international QS Five Stars Plus rating — the highest possible rating for a university, with top marks for teaching, facilities, research and other categories.

Benefit from our global connections

Beyond Western Australia, Curtin has campuses in Dubai, Malaysia, Mauritius and Singapore, on top of partnerships with universities and organisations worldwide — connections that will offer you excellent opportunities for international study experiences.

Graduate with job-ready skills

Curtin courses feature work integrated learning and industry placements, so you can step into your career with confidence. Our simulated workplaces include a moot court, field trial area and hospital ward.

Immerse yourself in Curtin life

Our vibrant campus includes student and sporting clubs, cultural celebrations and music events. The Exchange precinct is Curtin Perth's newest campus development, featuring student accommodation, a hotel and shopping outlets.

Enjoy the ease of living on campus

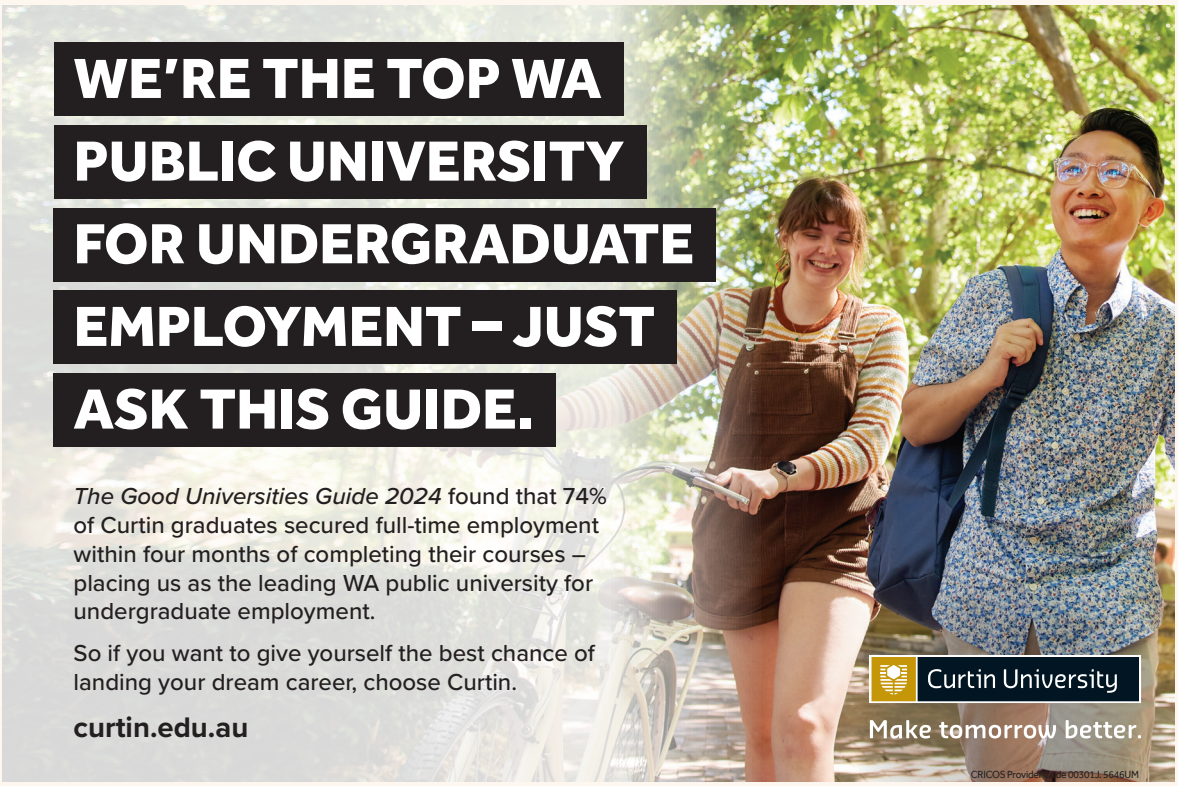
Living on campus helps you to make the most of your uni experience. We have various on-campus accommodation options that are safe, convenient and a great place to make friends!

Explore our admission pathways

Curtin offers alternative course entry pathways such as predicted ATAR, portfolio entry and bridging courses. We also offer a range of scholarships.

Learn more at **study.curtin.edu.au**.

Rating highlights	82% Staff qualification ★★★★★	74% Overall experience	74% Graduate employment	$53,200 Graduate salary



Macquarie University

mq.edu.au

Macquarie is committed to nurturing and empowering you to reach your full potential. We do this by helping you develop your practical know-how alongside your technical skills, encouraging you to experience new opportunities in Australia and across the globe, and assisting you to build your networks with our industry and community partners.

Our degrees

So that our degrees are responsive to the rapidly evolving job market, we design scores of them in consultation with many of our 4,000-plus industry partners. Practical, work-integrated experiences are built into our degrees so that you're equipped for the real world when you graduate. Additionally, our double degrees can be personalised, so you choose the combination you consider will best kick-start your career. These are just a few reasons why we're ranked #8 in Australia for employment options.

Our campus

Our stunning Wallumattagal campus is in the heart of Australia's largest high-tech precinct, Macquarie Park. There are more than 300 leading companies nearby, allowing you to tap into industry connections that give you an edge in your future career. Our campus is also home to some of Australia's most exceptional facilities, including the Macquarie University Hospital; a multi-award-winning incubator; a cybersecurity hub; a multi-million-dollar media hub; and cutting-edge science, computing, engineering and medical labs. Getting to Macquarie is easy, with the Sydney Metro stopping on campus, and abundant bus, road and bike connections available.

MACQUARIE University

Campus
NSW
Macquarie Park

Phone
(02) 9850 6767

CRICOS 00002J

TEQSA PRV12032

Rating highlights	85% Learning resources ★★★★★	74% Overall experience	80% Teaching quality	52% Learner engagement

Queensland University of Technology (QUT)

qut.edu.au

Campuses
QLD
Gardens Point
Kelvin Grove

Phone
(07) 3138 2000

CRICOS 00213J

TEQSA PRV12079

QUT will set you up for a bright future with the skills, knowledge and connections that will help you find your version of success.

Real-world courses

Study a course that gives you real experience alongside theory, so you can face the future with confidence. At QUT, you'll use industry-standard equipment in labs and clinics, work on real projects, undertake work experience and make connections with employers. Bring your ideas to life by developing your entrepreneurial mindset and practice.

We offer more than 220 degrees in architecture and built environment, business, communication, creative industries, design, education, engineering, health, information technology, justice, law, mathematics and science. You can study on campus or choose an online course. Our wide range of double degrees gives you greater variety in your study and a competitive advantage in your career.

If you're looking for a pathway option, consider a QUT College diploma for direct entry to several of our degrees.

Two inner-city campuses

Our Gardens Point and Kelvin Grove campuses offer state-of-the-art facilities in central Brisbane, with easy access to public transport. Experience our world-class labs, clinics, studios and workshops. Discover our collaborative learning spaces and social and recreational facilities, including cafés, swimming pools, gyms and sport arenas.

Rating highlights	72% Overall experience	83% Learning resources	72% Graduate employment	79% Skills development

Take the quiz.
Find your future.

QUT's Match My Skills quiz helps you find a career path that matches your strengths, skills and interests.

In just 10 minutes, you'll get a career persona and a personalised list of courses.

Find your future with Match My Skills.
qut.edu.au/match-my-skills

MATCH MY SKILLS

QUT

TEQSA Provider ID PRV12079 Australian University
CRICOS 00213J | © QUT 2023 25865

Murdoch University

murdoch.edu.au

Whether you want to change the whole world, some of the world, or just your world, our extensive range of courses and hands-on learning facilities will equip you with the skills you need.

Why study with us

We provide everything you would expect from a world-class university, including leading academics, world-changing research, state-of-the-art facilities, hands-on learning and course variety. At Murdoch, our students are encouraged to think for themselves and find new ways to push past the status quo – no matter who they are or where they have come from.

Facilities and services

As a Murdoch student, you'll learn in environments both in and outside of the classroom. You'll have the opportunity to benefit from our wide range of facilities, including our sustainable, inclusive and modern new teaching building, Boola Katitjin, designed to enhance your study experience and support students, academically and personally.

Admission and selection

We have a range of admission pathway options available, which consider your high school studies, or work and life experience. To study at Murdoch, you will need to meet the specific entry requirements for your course, as well as English Language Competency (ELC) requirements. To find out more, visit **murdoch.edu.au/courses**.

Applications can be made at any time using our easy online system through **myadmission.murdoch.edu.au**.

Study options

Depending on your course, we offer flexible study options including full-time or part-time and on-campus or online.

Murdoch University

Campuses

WA
Mandurah
Perth
Rockingham

Phone

1300 687 3624

CRICOS 00125J

Rating highlights	20:1	73%	83%	73%
	Student : teacher ratio ★★★★★	Overall experience	Learning resources	Student support

TAFE NSW

www.tafensw.edu.au

Phone 131 601
CRICOS 00591E
RTO 90003
HEP PRV 12049

TAFE NSW is a leading provider of education and training in Australia, with industry qualified and experienced staff that bring up-to-date, real-world skills directly to the classroom. We have over 130 years of history, and our courses and facilities are internationally renowned.

TAFE NSW has a variety of career areas to choose from, and part-time, full time and online study options are available. Whatever your course, you will develop current, practical skills through both real and simulated work environments. We partner with employers to provide mentorships, internships, work placements and real world learning. With over 25,000 employer connections, our graduates can be assured that their qualifications are well regarded.

Student Services

When you study at TAFE NSW, you're never alone. You can get help and assistance in nearly every aspect of your study life — from study support and student resources, to counselling, guidance and help finding jobs or accommodation.

Whatever your needs or circumstances, we have the people, the resources, the counselling and the facilities to help you focus on your studies and training.

Each TAFE NSW campus has a range of services and dedicated facilities to assist you throughout your study experience. You will have access to a range of support and facilities including:

- libraries
- childcare facilities
- careers advice
- résumé writing and job interview preparation
- counselling for study and other personal matters.

TAFE NSW

Make a life-changing move with a TAFE NSW Degree.

Apply now.

Study a degree with TAFE NSW and graduate with strong theoretical knowledge, practical experience and industry connections. You do not require an ATAR, and credit transfer or recognition of prior learning (RPL) may be available. Apply now at TAFE NSW, one of Australia's leading providers of education and training.

tafensw.edu.au

131 601

RTO 90003 | CRICOS 00591E | HEP PRV12049

William Angliss Institute

angliss.edu.au

Why study with us

William Angliss Institute is a multi-award winning training provider that focuses on developing leaders in the experience economy – foods, tourism, hospitality and events.

We have strong industry connections, with over 85 per cent of employers recommending William Angliss Institute as their training provider of choice. All our diplomas and degrees include opportunities to learn directly from industry experts — through work integrated learning, study trips, field excursions, demonstrations and masterclasses.

Our academic staff have extensive educational expertise and qualifications as well as broad industry experience.

Facilities & Services

Our main campus is in Melbourne's vibrant central business district. We also have campuses in Sydney and Singapore, with a global network of partner campuses across Asia.

We offer a range of services and assistance to support you in your student journey, which includes on-campus events, student clubs and societies, library and essential counselling, disability and wellbeing support.

Study options

We offer a broad range of training and education programs, from certificates, accredited traineeships and apprenticeships, diplomas through to degrees and postgraduate level studies. If you're considering further study, our comprehensive pathways program will assist with your progression in all of our specialisations.

Enquire today

Contact us via email at **enquiry@angliss.edu.au** or call +61 3 8595 5334.

Campuses

NSW
Sydney

VIC
Melbourne

Phone

(03) 8595 5334

CRICOS 01505M

CQUniversity Australia

cqu.edu.au

Campuses

NSW
Sydney

QLD
Brisbane
Bundaberg
Cairns
Emerald
Gladstone
Mackay
Rockhampton
Townsville

SA
Adelaide

VIC
Melbourne

Phone
13 27 86

CRICOS 00219C
TEQSA PRV12073
RTO 40939

Studying at CQUniversity Australia empowers you to be what you want to be.

Choose from our wide variety of TAFE and university qualifications, benefit from our commitment to inclusive, quality education, and graduate with the skills employers need now and into the future.

We see you achieving your goals

Our seamless pathways between certificates, diplomas, undergraduate, postgraduate and research higher degrees allow you to find the right study option to suit your goals.

As well as training for apprentices and trainees, we offer courses in:

- allied health
- business and accounting
- creative, performing and visual arts
- digital media, communication and arts
- education, teaching and childcare
- engineering, built environment and aviation
- English and study pathways
- information systems and technology
- law, criminology and justice
- nursing, paramedicine and health
- psychology, social work and community services
- safety sciences
- science, environment and agriculture
- service industries
- trades.

Visit **www.cqu.edu.au/courses** to explore all CQU courses.

We see you in our community

We are proud to make quality education accessible to everyone, regardless of postcode, background or life circumstances.

When you enroll at CQU, you become part of a vibrant student community, representing some of the highest national ratios of first-generation university attendees, and individuals from disadvantaged, mature age or Aboriginal and Torres Strait Islander backgrounds.

If you are interested in starting your TAFE or uni studies while still at school, or without an ATAR, we have entry options to help get you there.

Our small class sizes mean your lecturer can provide one-on-one support, plus our flexible study options allow you to study where and how you like. With one of the largest national footprints of any Australian university, studying on campus will mean you can choose one of our regional or city locations to suit your lifestyle. Alternatively, opting to study your CQU course online means you'll benefit from our 40-plus years' experience delivering innovative distance education.

We see you with tomorrow's career skills

Field and laboratory work, project-based learning, internships and work placements are key features in our courses to ensure you'll graduate with real-world knowledge and the skills employers need.

You'll learn from a teaching team with national and global recognitions for their research, industry experience and teaching methods. Plus, our career services provide opportunities to access career planning support and meet employers at face-to-face and virtual events.

As Australia's only social enterprise university, we strongly value a social innovation mindset. Regardless of your field of study, as a CQU student you'll develop social innovation skills to be able to solve complex social challenges. Your CQU degree will offer more than the confidence to create positive change, but also highly-desirable workforce skills including resilience, collaborative leadership and creative problem solving.

Learn more

Visit **www.cqu.edu.au**, call us on 13 27 86, or register to attend one of our face-to-face or virtual events.

Ranking & rating outcomes

Student experience

37% Learner engagement	83% Learning resources
78% Overall experience ★★★★★	81% Skills development
77% Student support ★★★★★	81% Teaching quality

Graduate outcomes

82%
Graduate employment
★★★★★

$63,300
Starting salary
★★★★★

Characteristics

60%
Staff qualifications

49%
First generation students
★★★★★

37%
Social equity
★★★★★

★★★★★ Five-star fields of study

- Agriculture & Environmental Studies
- Architecture & Building
- Business & Management
- Communications
- Computing & Information Systems
- Creative Arts
- Dentistry
- Education & Training
- Engineering & Technology
- Health Services & Support
- Humanities, Culture & Social Sciences
- Law & Paralegal Studies
- Psychology
- Rehabilitation
- Science & Mathematics
- Social Work

Edith Cowan University

ecu.edu.au

Campuses

WA
Joondalup
Mount Lawley
ECU South West

Phone
134 328

CRICOS 00279B

Edith Cowan University, or ECU, is one of Australia's youngest universities, named after one of Australia's most inspiring women.

Edith Cowan OBE was an Australian icon. She influenced the course of education in Australia, paving the way for many people to access education they could only previously dream of.

ECU is the youngest of Western Australia's five universities, opening its doors in 1991. And like the youngest in any family, it's on a mission to be noticed!

We're young and we're curious. We're constantly scanning global trends and translating this into challenging, realistic and practical courses that prepare our students for the future.

Our curiosity also extends to world-class research that has strong social, economic, environmental and cultural impact and makes a practical difference to people's lives.

At ECU, we believe that human creativity, combined with the inspiration of learning, has the power to transform lives and create a better world.

So, the preparation of our students includes teaching them the skills sought by industries and employers worldwide, such as creative thinking and problem solving. We encourage positive mindsets where problems are seen as opportunities.

This approach is extended across all eight teaching schools – Arts & Humanities, Business & Law, Education, Engineering, Medical & Health Sciences, Nursing, Science and the Western Australian Academy of Performing Arts.

ECU is now an established Australian leader in the delivery of quality teaching, student support and the overall experience of our students (*The Good Universities Guide* 2024).

High-quality teaching is integral to ECU's values. It's why we've been rated five stars in *The Good Universities Guide* for an amazing 17 straight years.

Edith Cowan OBE believed that education was fundamental to tackling social issues as well as the key to growth, change and improvement.

Befitting her vision, inclusion and equity are also part of our DNA, providing everyone an opportunity to access a quality education and to be always respected as individuals.

Want to find out more?

We'd love to hear from you and to tell you more about how you can choose from our diverse range of undergraduate and postgraduate courses, including research degrees.

Creative thinkers made here.

Apply now

ecu.edu.au

AUSTRALIA ECU EDITH COWAN UNIVERSITY

Unlock your superpower and open the door to your future.

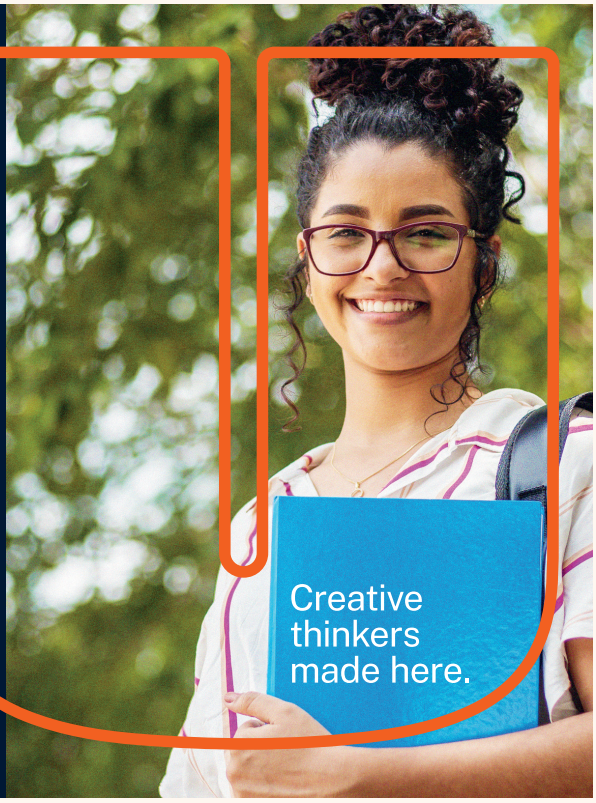
At ECU, we believe the ability to think creatively is a superpower. It's a skill that employers world-wide are looking for in uni graduates.

And because creative thinking and problem solving applies to any industry, you'll learn these skills whichever of our undergraduate courses you choose to study.

Where will creative thinking take you?

Apply now at **ECU.EDU.AU**

CRICOS Provider No. 00279B



Ranking & rating outcomes

Student experience

59% Learner engagement	89% Learning resources ★★★★★
83% Overall experience ★★★★★	87% Skills development ★★★★★
80% Student support ★★★★★	85% Teaching quality ★★★★★

Graduate outcomes

66%
Graduate employment

$49,200
Starting salary

Characteristics

30:1
Student : teacher ratio

40%
First generation students

16%
Social equity

★★★★★ Five-star fields of study

- Business & Management
- Communications
- Computing & Information Systems
- Creative Arts
- Education & Training
- Engineering & Technology
- Health Services & Support
- Humanities, Culture & Social Sciences
- Law & Paralegal Studies
- Nursing
- Psychology
- Rehabilitation
- Science & Mathematics
- Social Work

JAMES COOK UNIVERSITY AUSTRALIA

James Cook University

jcu.edu.au

James Cook University (JCU) is committed to top-quality teaching, learning and research that delivers practical benefits to communities, industries and the global environment. Our students and researchers are equipped with skills and knowledge to meet the demands of the workforce in the Tropics and throughout the world. Graduate with confidence when you study at a university ranked in the top 2 per cent in the world.[1]

A gateway to the Great Barrier Reef, JCU hosts more than 20,000 students, primarily spread across main campuses in Townsville (Bebegu Yumba campus, Douglas), Cairns (Ngumba-bada campus, Smithfield) and Singapore.

With additional study centres in Brisbane, Mt Isa (Murtupuni campus), Mackay (Ngudya Yamba campus), Rockhampton and Thursday Island (Ngulaigau Mudh campus) we are committed to creating a brighter future for life in the Tropics and beyond, through education and research that makes a difference locally, and globally.

Why study with us?

With over 100 degrees to choose from, within a wide range of study areas, JCU has a course for every career goal.

JCU offers more than education — we offer experiences like no other. While you study, you can benefit from authentic learning experiences on the Great Barrier Reef, inside the Daintree Rainforest and across the great Australian outback.

JCU is proud to be the first university in Australia to formally commit to the United Nations' Sustainable Development Goals. This emphasis on working with others to achieve a common goal and a common good is reflected in our ranking as number one in Australia for sustainable education.[2]

Gain practical experience working in regional and remote communities and exploring ecosystems as living laboratories. Develop high-level skills sooner through hands-on learning in labs, clinics, research stations and dedicated innovative spaces like the JCU Ideas Lab and The Science Place.

Industry-ready graduates

A JCU degree empowers you to make an impact. Our courses are aligned with professional standards through close partnerships with industry leaders. These connections provide students with opportunities for course-related work experience, internships and placements in real-world settings. Graduates emerge ready to kickstart their careers. That's why JCU is ranked number one in Queensland for full-time employment outcomes.[3]

With multiple pathway programs into our undergraduate degrees, there's a place for you at JCU.

Admission and selection

Entry requirements for all courses offered at JCU can be found online at **jcu.edu.au**.

Campuses

QLD
Brisbane
Cairns
Mackay
Mount Isa
Townsville

Global
Singapore

Phone

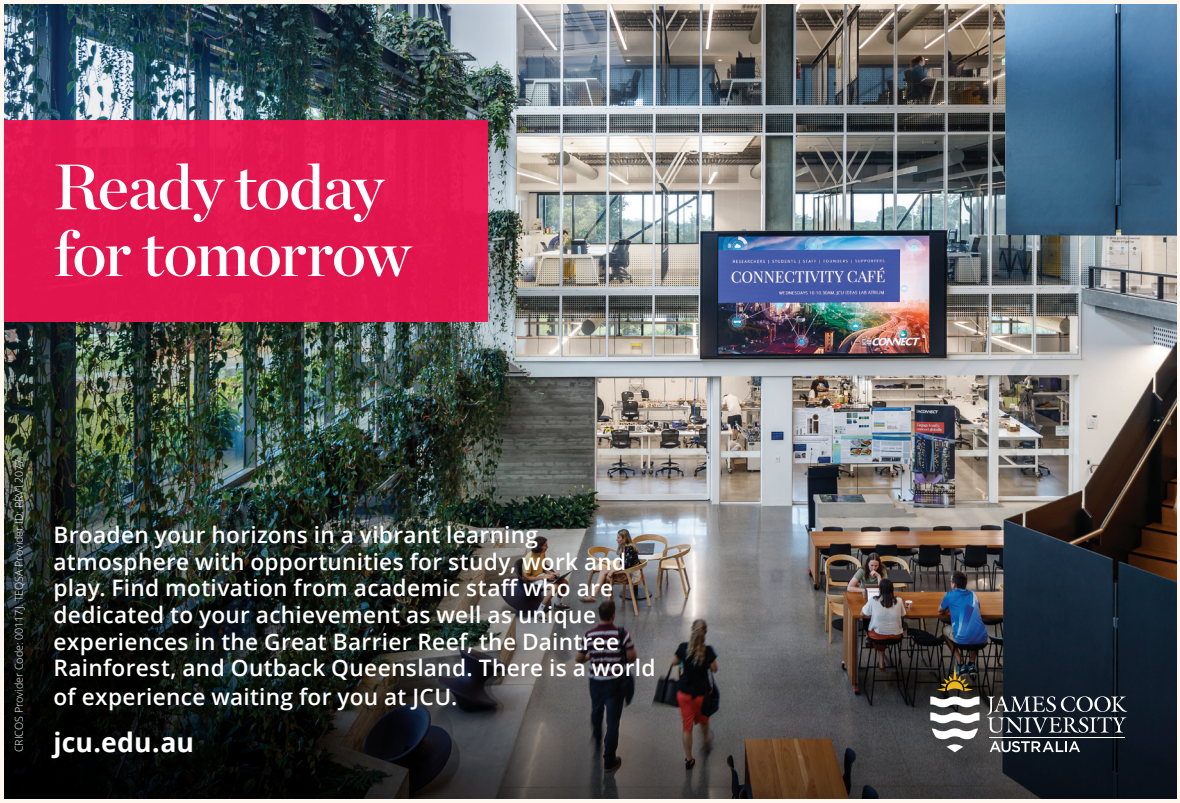
1800 246 446

CRICOS 00117J

[1]2023 Times Higher Education World University Rankings

[2]2023 QS Sustainability Rankings

[3]2024 Good Universities Guide



Ranking & rating outcomes

Student experience

58% Learner engagement	81% Learning resources
74% Overall experience	81% Skills development
75% Student support	77% Teaching quality

Graduate outcomes

78%
Graduate employment
★★★★★

$63,800
Starting salary
★★★★★

Characteristics

19:1
Student : teacher ratio
★★★★★

39%
First generation students

23%
Social equity
★★★★★

★★★★★ Five-star fields of study

- Dentistry
- Education & Training
- Engineering & Technology
- Health Services & Support
- Humanities, Culture & Social Sciences
- Medicine
- Nursing
- Pharmacy
- Psychology
- Rehabilitation
- Science & Mathematics
- Social Work
- Veterinary Science

Southern Cross University

Campuses
Gold Coast, QLD
Lismore, NSW
Northern Rivers, NSW

Branch Campuses
Coomera, QLD
Melbourne, VIC
Sydney, NSW
Perth, WA
The Hotel School Sydney, Melbourne, Brisbane & Hayman Island
The National Marine Science Centre, Coffs Harbour, NSW

Phone
1800 626 481

CRICOS 01241G

TEQSA PRV12043
Australian University

Southern Cross University

scu.edu.au

At Southern Cross University, we are driven by a clear purpose: to change lives through revolutionary learning and impactful research. Our game-changing education model is focused on active, immersive learning and increasing student success with innovative six-week study terms. When you join Southern Cross, you are part of a community of inspiring educators, talented students and passionate researchers who are making a positive impact in the world. Together, we are transforming tomorrow.

There's never been a better time to study with us at Southern Cross University.

A better way to learn

The Southern Cross Model is unique. It delivers a deeper learning experience for students centred on greater interactivity and connection with real-world applications. The shorter, more focused six-week unit structure gives students a greater sense of momentum and motivation as they achieve milestones quickly. Students are enjoying a more satisfying study experience with greater completion rates and higher grades than ever before with the Southern Cross Model.

Research for a better tomorrow

At Southern Cross University, our research focuses on protecting and enhancing the future. While serving our local regions is at the core of our research agenda, we are also creating a global impact.

In the latest Excellence in Research for Australia report, 23 of our research fields were classified as world standard or above.

Pathways to university

Our Early Offer Program allows you to secure your place in a Southern Cross University degree before your Year 12 results are even released, and our Transition to Uni is a fee-free, six-week course that is designed for school leavers who have completed Year 12 with an ATAR (or equivalent).

Our fee-free course, Preparing for Success Program, teaches you the skills you need to succeed at university and progress towards a new career.

Facilities and services

We are a multi-campus university on Australia's east coast, with main campuses in the Gold Coast, Queensland, and in the Northern Rivers and Coffs Harbour, New South Wales.

Our metro campuses in Sydney, Melbourne and Perth operate in collaboration with EduCo, and our unique partnership with Mulpha Australia — The Hotel School — has campuses in Sydney, Melbourne, Brisbane and on Hayman Island. Our Coomera Creative Campus is an educational partnership with TAFE Queensland.

Our online campus is at your fingertips and spans the world. Each campus — physical or online — offers state-of-the-art facilities and support services.

Scholarships

Southern Cross offers a range of scholarships from $600 to $32,000 for undergraduate, postgraduate, Indigenous Australian students as well as international students.

You can study

- Arts & humanities
- Business
- Education & teaching
- Engineering
- Health
- Indigenous knowledge
- Information Technology
- Law & justice studies
- Music and creative arts
- Pathway programs
- Science & environment
- Social work & community welfare
- Tourism
- Design your degree with shared majors

Southern Cross University

Transforming Tomorrow

A better way to learn

6-week terms

scu.edu.au

CRICOS Provider: 01241G | TEQSA Provider Code: PRV12043 Australian University

Ranking & rating outcomes

Student experience

37% Learner engagement	81% Learning resources
70% Overall experience	78% Skills development
73% Student support	77% Teaching quality

Graduate outcomes

76% Full-time employment

$53,400 Median graduate starting salary

Characteristics

26:1 Student : teacher ratio

43% First generation students

★★★★★

22% Social equity

★★★★★ Five-star fields of study

- Agriculture & Environmental Studies
- Business & Management
- Communications
- Computing & Information Systems
- Engineering & Technology
- Health Services & Support
- Law & Paralegal Studies
- Nursing
- Psychology
- Social Work
- Tourism, Hospitality, Sport & Leisure

The University of Melbourne

study.unimelb.edu.au

#1 in Australia*

#14 in the world*

#8 in graduate employability worldwide#

Why choose Melbourne?

The University of Melbourne has been at the leading edge of global research, discovery and learning for more than 160 years. Our research contributes to solving social, economic and environmental challenges facing the world today and into the future. We are ranked number one in Australia and number 14 globally*, and our graduates are among the world's most employable.

Our university community is one where diversity and inclusion are celebrated. Everyone is valued and respected, with equal access to opportunities to fulfil their talents and potential. Our aim is to create supportive environments that empower students to become well-rounded, highly skilled and resilient — ready to make an impact on a global scale.

Transformative learning experiences

The University comprises eight campuses situated on the unceded lands of the Wurundjeri Woi Wurrung, Bunurong, Yorta Yorta and Dja Dja Wurrung people. Our Parkville campus is within the largest biomedical precinct in the southern hemisphere, and our Southbank campus lies at the heart of Melbourne's famous Arts Precinct.

Within our diverse learning environments, students work alongside academics and researchers who are at the forefront of their field. Through industry-integrated learning, internships, volunteering and study abroad opportunities, students gain practical, real-world experience, strengthen their connections with industry and community, and hone their skills and expertise to become global leaders.

A distinctive approach to education

The Melbourne curriculum empowers students to direct their own learning experience. You'll be encouraged to see the world from different perspectives, learn to connect thoughts and ideas, find innovative solutions to problems and put them into practice. You can focus on your chosen discipline while exploring other diverse subjects across 100 different study areas. It's a unique opportunity to tailor your degree to your own interests and aspirations.

Choose from seven foundational bachelors degrees in arts, biomedicine, commerce, design, fine arts, music and science. We also offer specialist degrees in agriculture and oral health, where everything you study is structured for your chosen discipline. Once completed, you can enter the workforce with a broad knowledge base and career-ready skills. Or, continue the journey to gain specialised knowledge via a graduate degree or in graduate research.

Entry pathways into Melbourne

We're committed to helping you reach your full potential. If you don't meet the direct entry requirements, there are a range of undergraduate entry pathways to help you achieve your dream of studying with us:

- Access Melbourne is our special entry access scheme that helps us see the whole picture when you apply for undergraduate study. Access Melbourne takes into consideration your personal circumstances that may have affected your secondary studies. You may even qualify for guaranteed entry into your preferred course.
- For Indigenous students, the Bachelor of Arts (Extended), Bachelor of Science (Extended) and Diploma of General Studies (Extended) are enriched with tailored, wraparound support and resources.
- The Diploma in General Studies is a one-year program taught at our Dookie campus that provides a great foundation for tertiary study. If eligible, you'll then get guaranteed entry into select Melbourne undergraduate degrees.

Campuses

VIC
Burnley
Creswick
Dookie
Fishermans Bend
Parkville
Shepparton
Southbank
Werribee

Phone

13 MELB (13 6352)

CRICOS 00116K

**QS World University Rankings 2024*

#QS Graduate Employability Rankings 2022

Create your own path at Melbourne

Discover your strengths and passions while gaining the knowledge, skills and experience to set yourself up for the future, whatever you choose to do.

study.unimelb.edu.au

THE UNIVERSITY OF MELBOURNE

Ranking & rating outcomes

Student Experience

51% Learner engagement	**79%** Learning resources
67% Overall experience	**75%** Skills development
62% Student support	**78%** Teaching quality

Graduate Outcomes

62%
Graduate employment

$29,300
Starting salary

Characteristics

Top 20%
Student demand
★★★★★

80%
Staff qualifications

19:1
Student : teacher ratio
★★★★★

15%
First generation students

6%
Social equity

★★★★★ Five-star fields of study

Communications

Creative Arts

The University of Notre Dame Australia

notredame.edu.au

Campuses

NSW
Sydney

WA
Fremantle
Broome

Phone
(08) 9433 0533
(02) 8204 4404

CRICOS 01032F

The University of Notre Dame Australia empowers you to make a difference through our unique, holistic approach to education. You are immersed in an intellectual tradition that has inspired the world's best thinkers for centuries, and our lecturers are industry professionals and leaders in their fields who guide you to realise your academic potential.

Why study with us

Our degrees offer practical, career-focused learning, which combines theoretical knowledge and workplace experience, as well as a strong foundation in ethics, to help ensure you graduate job-ready.

Pastoral care is at the heart of our ethos — including small class sizes, one-on-one contact with academic staff, mentoring programs and counselling support. We provide tailored support programs for international, interstate and regional students. We also focus on providing students with access to career guidance, practical workplace experience and direct links to employers.

Facilities and services

A national Catholic university with more than 11,000 students, Notre Dame has campuses in Fremantle and Broome in WA, Sydney in NSW and eight clinical schools in NSW and Victoria. We welcome people of all faiths or none at all. As an academic community, we encourage open and rigorous enquiry, debate and discussion.

The university has developed a solid platform of research engagement across its six focus areas of ethics, philosophy, theology, Catholic education, health and Indigenous studies, stemming from three principal research institutes: the Institute for Ethics & Society in Sydney, the Institute for Health Research in Fremantle and the Nulungu Research Institute in Broome.

Our Fremantle campus is located in historic buildings in the beachside city 20 minutes south of Perth, with leafy courtyards and cafes all forming part of the quintessential university town experience.

Our Broadway campus, located in Sydney's bustling inner-city university precinct, provides a welcoming social hub within easy walking distance from the city's CBD and Central Station.

At our Darlinghurst campus, also in Sydney, medicine and nursing students learn in excellent facilities including simulated wards and consultation suites just a stone's throw from one of the country's top medical facilities, St Vincent's Hospital.

Admission and selection

Notre Dame's admission process is multifaceted and considers every applicant on an individual basis. While each program has academic entry requirements, the university also considers the whole person, as succeeding in your chosen profession requires more than academic excellence.

We consider your:

- academic record
- personal qualities and motivation to study
- contribution to community life.

Study options

A broad range of degrees are offered in the following schools: Arts & Sciences; Education; Law & Business; Medicine; Nursing & Midwifery; Health Sciences & Physiotherapy; and Philosophy & Theology.

Ranking & rating outcomes

Student experience

65% Learner engagement ★★★★★	80% Learning resources
77% Overall experience	87% Skills development ★★★★★
73% Student support	84% Teaching quality ★★★★★

Graduate outcomes

78% Graduate employment ★★★★★

$62,000 Starting salary ★★★★★

Characteristics

24:1 Student : teacher ratio

29% First generation students

11% Social equity

★★★★★ Five-star fields of study

- Business & Management
- Communications
- Education & Training
- Health Services & Support
- Humanities, Culture & Social Sciences
- Law & Paralegal Studies
- Nursing
- Psychology
- Rehabilitation
- Science & Mathematics
- Social Work
- Tourism, Hospitality, Sport & Leisure

University of New England (UNE)

www.une.edu.au

Campuses

NSW
Armidale

Phone
1800 818 965

CRICOS 00003G

**The Good Universities Guide Ratings for 2007–2024.*

At UNE you get more than a degree, you receive a complete university experience: a vibrant, supportive community, small classes and access to expert lecturers.

This means that you get every opportunity to reach your full potential and get the very best start, plus some great memories along the way.

It's why UNE is the only Australian public university awarded the maximum 5 stars for Overall Experience by *The Good Universities Guide**, 18 years in a row.

Now, more than ever, UNE's experience can help you respond to disruption, new technology, workplace changes, and new possibilities. It makes sense to study with a university that has a long history of helping people like you become future-fit.

Partner with a university that knows how to help you respond to a rapidly changing world.

About UNE

Established in the 1930s by the University of Sydney, UNE is the oldest university in Australia outside of a capital city, and has a well-earned reputation as one of Australia's great teaching, training and research universities.

Set on a spectacular 74 hectares and featuring the original homestead at the heart of the campus, UNE combines heritage with modern academic, sporting, recreational and accommodation facilities. UNE has a campus in Armidale and study centres in Parramatta, Taree and Tamworth, as well as several other locations throughout regional NSW.

Campus accommodation

UNE remains one of the few universities to provide the complete on-campus experience, combining affordability, student support and community, as well as extensive sporting facilities. UNE's residential accommodation consists of eight colleges, including six traditional college residences, a village of self-contained units and 211 modern studio apartments. Each college has its own distinct character and all of them welcome students into friendly, inclusive and supportive communities.

Living on campus in UNE's residential accommodation means that you will be conveniently located in the heart of UNE, close to classes, libraries, cafes, shops and SportUNE, and only minutes from the Armidale CBD.

Study online

We now have more than 18,000 online students studying around 150 online courses. We provide 24/7 tutor support and even our exams are online. We have three teaching periods (trimesters), commencing in February, June and October — giving you greater choice about when and how much you study each year.

Pathways to study

If it's been a while since you last studied or if you don't have entry qualifications, UNE offers a range of pathways to help get you on your way, including the Pathways Enabling Course, Science Pathways and TRACKS Tertiary Preparation for Aboriginal and Torres Strait Islander students. The Pathways Enabling Course is studied fully online, has no tuition fees and will give you entry and credit to most undergraduate degrees at UNE.

For a complete list of around 150 courses, or to apply now, visit **une.edu.au/study** or FREECALL 1800 818 865.

Australia's best Overall Student Experience is also the most affordable

Live on campus for as little as $165 per week

- All bills included: unlimited Wi-Fi and heating
- Freedom to choose from catered and non-catered options
- Flexible contract options to suit different degrees
- Easy access to academic and social support
- Walking distance to classes, sporting and social activities
- Scholarships that can save you 50% on fees*

*On room costs only, up to the value of $5,000

UNE has earned the maximum **five-star rating** from the Good Universities Guide for Overall Student Experience, **18 years in a row**.

Applications now open for 2024
une.edu.au/accommodation • 1800 818 865

une University of New England

Future fit your life

Ranking & rating outcomes

Student experience

24% Learner engagement	83% Learning resources
80% Overall experience ★★★★★	78% Skills development
78% Student support ★★★★★	83% Teaching quality ★★★★★

Graduate outcomes

83%
Graduate employment
★★★★★

$58,100
Starting salary

Characteristics

26:1
Student : teacher ratio

41%
First generation students

22%
Social equity

★★★★★ Five-star fields of study

- Agriculture & Environmental Studies
- Architecture & Building
- Business & Management
- Communications
- Computing & Information Systems
- Creative Arts
- Education & Training
- Humanities, Culture & Social Sciences
- Law & Paralegal Studies
- Medicine
- Psychology
- Science & Mathematics
- Social Work

University of Newcastle

www.newcastle.edu.au

THE UNIVERSITY OF NEWCASTLE AUSTRALIA

Campuses

NSW
Callaghan
Newcastle
Ourimbah
Gosford
Sydney

Phone
(02) 4921 5000

CRICOS 00109J

**QS World University Rankings 2024.*

At the University of Newcastle, there's a place for you. We're committed to inclusivity, diversity and ensuring every student feels valued, supported and empowered in their educational journey. As a top 175 university in the world*, the University of Newcastle is a global hub for innovation and experiential learning, and we've been inspiring students from across the world for more than half a century.

Innovative learning environments

At the University of Newcastle, we believe in the power of experiential learning. Our state-of-the-art facilities, cutting-edge technologies and vibrant, innovative environments are ideal for connecting learning and lifestyle. From using virtual reality technology to train midwives to helping education students develop their skills in a simulated classroom, innovation is at the centre of all we do.

Global recognition and impact

For nearly 60 years, we've welcomed students from 114 countries, nurturing them to become the world's leading thinkers, creators, leaders, innovators and change-makers. Our unwavering commitment to excellence has earned us a global rank of 173rd* and a place among the top 30 universities worldwide for impact, addressing the United Nations Sustainable Development Goals.

Pathways to success

For those seeking a fresh start or career change, or faced challenges in their educational journey, there's a place for you at the University of Newcastle. Our pathway programs are tailored to meet your needs, and we pride ourselves on being the largest provider of alternative entry programs in Australia. These programs, often free, are designed to equip you with the skills to not only gain entry, but also thrive at university and beyond.

Supporting our Aboriginal and Torres Strait Islander community

We are proud to provide a culturally-safe environment in which Aboriginal and Torres Strait Islander staff, students, researchers and community are welcomed and supported. Since the 1970s, we have made an unparalleled contribution to the Indigenous higher education in Australia and are the leading university for Aboriginal and Torres Strait Islander enrolments. Our sector-leading status is due to a whole-of-university commitment to First Nations excellence, including the vital work of the Wollotuka Institute, the Office of Indigenous Strategy and Leadership and our Indigenous Health Unit — *Thurru*.

Experience beyond the classroom

Career ready placements are a cornerstone of our educational approach. We take education outside the classroom and beyond the textbooks. Our strong partnerships with local and global organisations ensure that everything you study is shaped by the real world. That means students get access to internships, work experience and industry connections — across all our degrees — to ensure everyone gets the invaluable real-world experience.

So come join us. Bring your ideas, your aspirations and your passion. There's a place for you at the University of Newcastle.

There's a place for you.

CRICOS Provider 00109J

THE UNIVERSITY OF NEWCASTLE AUSTRALIA

Explore our 100+ undergraduate programs.

newcastle.edu.au/undergrad

Ranking & rating outcomes

Student experience

48% Learner engagement	81% Learning resources
74% Overall experience	80% Skills development
74% Student support	79% Teaching quality

Graduate outcomes

77%
Graduate employment
★★★★★

$55,800
Starting salary

Characteristics

82%
Staff qualifications
★★★★★

37%
First generation students

23%
Social equity
★★★★★

★★★★★ Five-star fields of study

- Architecture & Building
- Dentistry
- Engineering & Technology
- Health Services & Support
- Law & Paralegal Studies
- Pharmacy
- Psychology
- Social Work

University and other higher education institutions in Australia

A-Z listings

This section lists higher education providers alphabetically. Institutions are described in terms of their basic key facts, including study modes, the number of students and their distribution (e.g. undergraduate vs postgraduate and international vs domestic students' proportions).

Key facts

At a Glance		Student Cohort		Student Study Modes	
Total students	xx	UG / PG	xx	Full-time / Part-time	xx
Non-school leavers (UG)	xx	Domestic / Int'l	xx	On-campus / Off-campus	xx
Campus(es)	xx				

Total students

This indicates the total number of students at the institution.

Non-school leavers (UG)

This indicates the percentage of enrolled students with a background other than Year 12. Figures here refer to the 2020 enrolment year, all other data refers to 2022.

UG / PG

This is the proportion of enrolled undergraduate vs postgraduate students.

Domestic / Int'l

This is the proportion of enrolled domestic undergraduate students compared to their international counterparts.

Full-time / Part-time

This is the proportion of full-time vs part-time undergraduate students.

On-campus / Off-campus

This is the proportion of on-campus vs off-campus undergraduate students.

Campus(es)

This details the institution's location. Information is supplied by the relevant institutions.

Australian Catholic University (ACU)

www.acu.edu.au | Ph: 1300 275 228 | CRICOS: 00004G

At a Glance		Student Cohort		Student Study Modes	
Total students	32,788	UG / PG	80% / 20%	Full-time / Part-time	85% / 15%
Non-school leavers (UG)	35%	Domestic / Int'l	90% / 10%	On-campus / Off-campus	95% / 5%
Campus(es)	Adelaide, SA; Ballarat, VIC; Brisbane, QLD; Canberra, ACT; Melbourne, VIC; North Sydney, NSW; Strathfield, NSW				

Australian National University (ANU)

www.anu.edu.au | Ph: (02) 6125 5111 | CRICOS: 00120C

At a Glance		Student Cohort		Student Study Modes	
Total students	24,686	UG / PG	55% / 45%	Full-time / Part-time	80% / 20%
Non-school leavers (UG)	25%	Domestic / Int'l	80% / 20%	On-campus / Off-campus	80% / 20%
Campus(es)	Canberra, ACT				

Avondale University

www.avondale.edu.au | Ph: (02) 4980 2222 | CRICOS: 00017B

Campuses

Lake Macquarie, NSW; Sydney, NSW

Interested in studying at Avondale University?

View their courses now on *The Good Universities Guide* website.

Scan this QR code to view all pre-degree, undergraduate and/or postgraduate courses offered by Avondale University. Each course listing includes information about subjects, entry requirements, pathway options, fees and much more.

Bond University

www.bond.edu.au | Ph: 1800 074 074 | CRICOS: 00017B

At a Glance		Student Cohort		Student Study Modes	
Total students	5,175	UG / PG	45% / 55%	Full-time / Part-time	90% / 10%
Non-school leavers (UG)	60%	Domestic / Int'l	80% / 20%	On-campus / Off-campus	95% / 5%
Campus(es)	Gold Coast, QLD				

Charles Darwin University (CDU)

www.cdu.edu.au | Ph: 1800 061 963 | CRICOS: 00300K (NT); 03286A (NSW)

At a Glance		Student Cohort		Student Study Modes	
Total students	14,616	UG / PG	80% / 20%	Full-time / Part-time	50% / 50%
Non-school leavers (UG)	90%	Domestic / Int'l	90% / 10%	On-campus / Off-campus	15% / 85%
Campus(es)	Alice Springs, NT; Casuarina, NT; Sydney, NSW; Waterfront Darwin, NT; Jabiru Centre, NT; Katherinel, NT; Katherine Town Centre, NT; Nhulunbuy, NT; Palmerston, NT; Tennant Creek Centre, NT				

Interested in studying at Charles Darwin University?

View their courses now on *The Good Universities Guide* website.

Scan this QR code to view all pre-degree, undergraduate and/or postgraduate courses offered by Charles Darawin University. Each course listing includes information about subjects, entry requirements, pathway options, fees and much more.

Charles Sturt University

www.csu.edu.au | Ph: 1800 275 278 | CRICOS: 00005F

At a Glance		Student Cohort		Student Study Modes	
Total students	40,385	UG / PG	65% / 35%	Full-time / Part-time	45% / 55%
Non-school leavers (UG)	80%	Domestic / Int'l	90% / 10%	On-campus / Off-campus	20% / 80%
Campus(es)	Albury-Wodonga, NSW; Bathurst, NSW; Canberra, ACT; Dubbo, NSW; Goulburn, NSW; Manly, NSW; Orange, NSW; Parramatta, NSW; Port Macquarie, NSW; Wagga Wagga, NSW				

CQUniversity Australia

www.cqu.edu.au | Ph: 13 27 86 | CRICOS: 00219C

At a Glance		Student Cohort		Student Study Modes	
Total students	22,620	UG / PG	70% / 30%	Full-time / Part-time	55% / 45%
Non-school leavers (UG)	75%	Domestic / Int'l	95% / 5%	On-campus / Off-campus	10% / 90%
Campus(es)	Adelaide, SA; Brisbane, QLD; Bundaberg, QLD; Cairns, QLD; Emerald, QLD; Gladstone, QLD; Mackay, QLD; Melbourne, VIC; Rockhampton, QLD; Sydney, NSW; Townsville, QLD				

Interested in studying at CQUniversity?

View their courses now on *The Good Universities Guide* website.

Scan this QR code to view all pre-degree, undergraduate and/or postgraduate courses offered by CQUniversity. Each course listing includes information about subjects, entry requirements, pathway options, fees and much more.

Curtin University

www.curtin.edu.au | Ph: 1300 222 888 | CRICOS: 00301J

At a Glance		Student Cohort		Student Study Modes	
Total students	50,710	UG / PG	80% / 20%	Full-time / Part-time	70% / 30%
Non-school leavers (UG)	60%	Domestic / Int'l	75% / 25%	On-campus / Off-campus	65% / 35%
Campus(es)	Kalgoorlie, WA; Perth, WA				

Interested in studying at Curtin University?

View their courses now on *The Good Universities Guide* website.

Scan this QR code to view all pre-degree, undergraduate and/or postgraduate courses offered by Curtin University. Each course listing includes information about subjects, entry requirements, pathway options, fees and much more.

Deakin University

www.deakin.edu.au | Ph: 1800 693 888 | CRICOS: 00113B

At a Glance		Student Cohort		Student Study Modes	
Total students	62,868	UG / PG	70% / 30%	Full-time / Part-time	70% / 30%
Non-school leavers (UG)	55.%	Domestic / Int'l	85% / 15%	On-campus / Off-campus	40% / 60%
Campus(es)	Burwood, VIC; Warrnambool, VIC; Waterfront, VIC; Waurn Ponds, VIC				

Edith Cowan University

www.ecu.edu.au | Ph: 134 328 | CRICOS: 00279B

At a Glance		Student Cohort		Student Study Modes	
Total students	30,069	UG / PG	70% / 30%	Full-time / Part-time	70% / 30%
Non-school leavers (UG)	80%	Domestic / Int'l	85% / 15%	On-campus / Off-campus	50% / 50%
Campus(es)	Joondalup, WA; Mount Lawley, WA; South West, WA				

Interested in studying at Edith Cowan University?

View their courses now on *The Good Universities Guide* website.

Scan this QR code to view all pre-degree, undergraduate and/or postgraduate courses offered by Edith Cowan University. Each course listing includes information about subjects, entry requirements, pathway options, fees and much more.

Federation University

www.federation.edu.au | Ph: 1800 333 864 | CRICOS: 00103D

At a Glance		Student Cohort		Student Study Modes	
Total students	13,866	UG / PG	75% / 25%	Full-time / Part-time	70% / 30%
Non-school leavers (UG)	70%	Domestic / Int'l	65% / 35%	On-campus / Off-campus	80% / 20%
Campus(es)	Berwick, VIC; Brisbane, QLD; Camp Street (Ballarat), VIC; Gippsland, VIC; Mt Helen, VIC; SMB (Ballarat), VIC; Wimmera, VIC				

Flinders University

www.flinders.edu.au | Ph: 1300 3534 633 | CRICOS: 00114A

At a Glance		Student Cohort		Student Study Modes	
Total students	25,531	UG / PG	60% / 40%	Full-time / Part-time	75% / 25%
Non-school leavers (UG)	50%	Domestic / Int'l	90% / 10%	On-campus / Off-campus	75% / 25%
Campus(es)	Bedford Park, SA; Tonsley, SA; Victoria Square, SA				

Griffith University

www.griffith.edu.au | Ph: (07) 3735 7111 | CRICOS: 00233E

At a Glance		Student Cohort		Student Study Modes	
Total students	49,220	UG / PG	75% / 25%	Full-time / Part-time	75% / 25%
Non-school leavers (UG)	60%	Domestic / Int'l	90% / 10%	On-campus / Off-campus	20% / 80%
Campus(es)	Gold Coast, QLD; Logan, QLD; Mount Gravatt, QLD; Nathan, QLD; South Bank, QLD				

James Cook University (JCU)

www.jcu.edu.au | Ph: 1800 246 446 | CRICOS: 00117J

At a Glance		Student Cohort		Student Study Modes	
Total students	19,712	UG / PG	70% / 30%	Full-time / Part-time	75% / 25%
Non-school leavers (UG)	60%	Domestic / Int'l	75% / 25%	On-campus / Off-campus	60% / 40%
Campus(es)	Brisbane, QLD; Cairns, QLD; Mackay, QLD; Mount Isa, QLD; Townsville, QLD				

Interested in studying at James Cook University?

View their courses now on *The Good Universities Guide* website.

Scan this QR code to view all pre-degree, undergraduate and/or postgraduate courses offered by James Cook University. Each course listing includes information about subjects, entry requirements, pathway options, fees and much more.

La Trobe University

www.latrobe.edu.au | Ph: 1300 528 762 | CRICOS: 00115M

At a Glance		Student Cohort		Student Study Modes	
Total students	35,269	UG / PG	80% / 20%	Full-time / Part-time	75% / 25%
Non-school leavers (UG)	60%	Domestic / Int'l	85% / 15%	On-campus / Off-campus	5% / 95%
Campus(es)	Albury-Wodonga, VIC; Bendigo, VIC; City (Melbourne), VIC; Franklin Street, VIC; Melbourne, VIC; Mildura, VIC; Shepparton, VIC; Sydney, NSW				

Macquarie University

www.mq.edu.au | Ph: (02) 9850 6767 | CRICOS: 00002J; 02942D (ELC)

At a Glance		Student Cohort		Student Study Modes	
Total students	44,895	UG / PG	75% / 25%	Full-time / Part-time	75% / 25%
Non-school leavers (UG)	80%	Domestic / Int'l	85% / 15%	On-campus / Off-campus	70% / 30%
Campus(es)	North Ryde, NSW				

Interested in studying at Macquarie University?

View their courses now on *The Good Universities Guide* website.

Scan this QR code to view all pre-degree, undergraduate and/or postgraduate courses offered by Macquarie University. Each course listing includes information about subjects, entry requirements, pathway options, fees and much more.

Monash University

www.monash.edu/study | Ph: (03) 9903 8800 | CRICOS: 00008C

At a Glance		Student Cohort		Student Study Modes	
Total students	87,115	UG / PG	65% / 35%	Full-time / Part-time	90% / 10%
Non-school leavers (UG)	25%	Domestic / Int'l	60% / 40%	On-campus / Off-campus	90% / 10%
Campus(es)	Caulfield, VIC; City - Collins Street, VIC; Law Chambers, VIC; Clayton, VIC; Parkville, VIC; Peninsula, VIC				

Murdoch University

www.murdoch.edu.au | Ph: 1300 687 3624 | CRICOS: 00125J

At a Glance		Student Cohort		Student Study Modes	
Total students	23,265	UG / PG	85% / 15%	Full-time / Part-time	70% / 30%
Non-school leavers (UG)	70%	Domestic / Int'l	65% / 35%	On-campus / Off-campus	60% / 40%
Campus(es)	Mandurah, WA; Perth, WA; Rockingham, WA				

Interested in studying at Murdoch University?

View their courses now on *The Good Universities Guide* website.

Scan this QR code to view all pre-degree, undergraduate and/or postgraduate courses offered by Murdoch University. Each course listing includes information about subjects, entry requirements, pathway options, fees and much more.

Queensland University of Technology (QUT)

www.qut.edu.au | Ph: (07) 3138 2000 | CRICOS: 00213J

At a Glance		Student Cohort		Student Study Modes	
Total students	53,263	UG / PG	75% / 25%	Full-time / Part-time	80% / 20%
Non-school leavers (UG)	60%	Domestic / Int'l	90% / 10%	On-campus / Off-campus	70% / 30%
Campus(es)	Gardens Point, QLD; Kelvin Grove, QLD				

Interested in studying at Queensland University of Technology?

View their courses now on *The Good Universities Guide* website.

Scan this QR code to view all pre-degree, undergraduate and/or postgraduate courses offered by Queensland University of Technology (QUT). Each course listing includes information about subjects, entry requirements, pathway options, fees and much more.

RMIT University

www.rmit.edu.au | Ph: (03) 9925 2000 | CRICOS: 00122A

At a Glance		Student Cohort		Student Study Modes	
Total students	76,132	UG / PG	75% / 25%	Full-time / Part-time	80% / 20%
Non-school leavers (UG)	50%	Domestic / Int'l	55% / 45%	On-campus / Off-campus	85% / 15%
Campus(es)	Brunswick, VIC; Bundoora, VIC; Hamilton, VIC; Melbourne City, VIC; Point Cook Airfield, VIC				

Southern Cross University

www.scu.edu.au | Ph: 1800 626 481 | CRICOS: 01241G

At a Glance		Student Cohort		Student Study Modes	
Total students	18,676	UG / PG	75% / 25%	Full-time / Part-time	60% / 40%
Non-school leavers (UG)	80%	Domestic / Int'l	85% / 15%	On-campus / Off-campus	35% / 65%
Campus(es)	Coomera, QLD; Gold Coast, QLD; Lismore, NSW; Melbourne, VIC; Northern Rivers, NSW; Perth, WA; Sydney, NSW, The Hotel School Melbourne, VIC, QLD & NSW				

Interested in studying at Southern Cross University?

View their courses now on *The Good Universities Guide* website.

Scan this QR code to view all pre-degree, undergraduate and/or postgraduate courses offered by Southern Cross University. Each course listing includes information about subjects, entry requirements, pathway options, fees and much more.

Swinburne University of Technology

www.swinburne.edu.au | Ph: 1300 794 628 | CRICOS: 00111D

At a Glance		Student Cohort		Student Study Modes	
Total students	41,799	UG / PG	85% / 15%	Full-time / Part-time	60% / 40%
Non-school leavers (UG)	75%	Domestic / Int'l	80% / 20%	On-campus / Off-campus	40% / 60%
Campus(es)	Croydon, VIC; Hawthorn, VIC; Prahran, VIC; Wantirna, VIC				

TAFE NSW

www.tafensw.edu.au | Ph: 131 601 | CRICOS: 00591E | RTO: 90003 | HEP: PRV12049

Campuses

TAFE NSW has 32 campuses in metropolitan Sydney and 98 campuses in cities and towns around NSW. You can find more information at **www.tafensw.edu.au/locations.**

Interested in studying at TAFE NSW?

View their courses now on *The Good Universities Guide* website.

Scan this QR code to view all pre-degree, undergraduate and/or postgraduate courses offered by TAFE NSW. Each course listing includes information about subjects, entry requirements, pathway options, fees and much more.

The University of Adelaide

www.adelaide.edu.au | Ph: (08) 8313 7335 | CRICOS: 00123M

At a Glance		Student Cohort		Student Study Modes	
Total students	30,739	UG / PG	70% / 30%	Full-time / Part-time	85% / 15%
Non-school leavers (UG)	45%	Domestic / Int'l	75% / 25%	On-campus / Off-campus	95% / 5%
Campus(es)	North Terrace, SA; Roseworthy, SA; Waite, SA				

The University of Melbourne

study.unimelb.edu.au | Ph: 13 MELB (13 6325) | CRICOS: 00116K

At a Glance		Student Cohort		Student Study Modes	
Total students	71,104	UG / PG	45% / 55%	Full-time / Part-time	90% / 10%
Non-school leavers (UG)	25%	Domestic / Int'l	65% / 35%	On-campus / Off-campus	55% / 45%
Campus(es)	Burnley, VIC; Creswick, VIC; Dookie, VIC; Parkville, VIC; Shepparton, VIC; Southbank, VIC; Werribee, VIC				

Interested in studying at The University of Melbourne?

View their courses now on *The Good Universities Guide* website.

Scan this QR code to view all pre-degree, undergraduate and/or postgraduate courses offered by The University of Melbourne. Each course listing includes information about subjects, entry requirements, pathway options, fees and much more.

The University of Notre Dame Australia

www.notredame.edu.au | Ph: (08) 9433 0533 | CRICOS: 01032F

At a Glance		Student Cohort		Student Study Modes	
Total students	12,291	UG / PG	75% / 25%	Full-time / Part-time	85% / 15%
Non-school leavers (UG)	45%	Domestic / Int'l	95% / 5%	On-campus / Off-campus	95% / 5%
Campus(es)	Broome, WA; Fremantle, WA; Sydney, NSW				

Interested in studying at The University of Notre Dame?

View their courses now on *The Good Universities Guide* website.

Scan this QR code to view all pre-degree, undergraduate and/or postgraduate courses offered by The University of Notre Dame. Each course listing includes information about subjects, entry requirements, pathway options, fees and much more.

The University of Queensland (UQ)

www.uq.edu.au | Ph: (07) 3365 2203 | CRICOS: 00025B; 00091C (ICTE)

At a Glance		Student Cohort		Student Study Modes	
Total students	56,220	UG / PG	60% / 40%	Full-time / Part-time	85% / 15%
Non-school leavers (UG)	45%	Domestic / Int'l	75% / 25%	On-campus / Off-campus	45% / 55%
Campus(es)	Gatton, QLD; Herston, QLD; St Lucia, QLD				

The University of Western Australia (UWA)

www.uwa.edu.au | Ph: (08) 6488 6000 | CRICOS: 00126G

At a Glance		Student Cohort		Student Study Modes	
Total students	26,680	UG / PG	60% / 40%	Full-time / Part-time	80% / 20%
Non-school leavers (UG)	50%	Domestic / Int'l	85% / 15%	On-campus / Off-campus	70% / 30%
Campus(es)	Albany Centre, WA; Crawley, WA				

Torrens University Australia

www.torrens.edu.au | Ph: 1300 575 803 | CRICOS: 03389E

At a Glance		Student Cohort		Student Study Modes	
Total students	23,445	UG / PG	60% / 40%	Full-time / Part-time	55% / 45%
Non-school leavers (UG)	-	Domestic / Int'l	70% / 30%	On-campus / Off-campus	10% / 90%
Campus(es)	Sydney, NSW; Melbourne VIC; Adelaide, SA; Brisbane, QLD				

University of Canberra

www.canberra.edu.au | Ph: (02) 6201 5111 | CRICOS: 00212K

At a Glance		Student Cohort		Student Study Modes	
Total students	16,306	UG / PG	75% / 25%	Full-time / Part-time	75% / 25%
Non-school leavers (UG)	50%	Domestic / Int'l	85% / 15%	On-campus / Off-campus	45% / 55%
Campus(es)	Bruce, ACT				

University of Divinity

www.divinity.edu.au | Ph: (03) 9853 3177 | CRICOS: 01037A

At a Glance		Student Cohort		Student Study Modes	
Total students	1,427	UG / PG	40% / 60%	Full-time / Part-time	35% / 65%
Non-school leavers (UG)	-	Domestic / Int'l	85% / 15%	On-campus / Off-campus	20% / 80%
Campus(es)	Adelaide, SA; Sydney, NSW; Melbourne, VIC; Milton, QLD; Mount Claremont, WA				

une University of New England

University of New England

www.une.edu.au | Ph: 1800 818 965 | CRICOS: 00003G

At a Glance		Student Cohort		Student Study Modes	
Total students	23,691	UG / PG	70% / 30%	Full-time / Part-time	40% / 60%
Non-school leavers (UG)	90%	Domestic / Int'l	95% / 5%	On-campus / Off-campus	5% / 95%
Campus(es)	Armidale, NSW				

Interested in studying at University of New England?

View their courses now on *The Good Universities Guide* website.

Scan this QR code to view all pre-degree, undergraduate and/or postgraduate courses offered by University of New England. Each course listing includes information about subjects, entry requirements, pathway options, fees and much more.

University of Newcastle

www.newcastle.edu.au | Ph: (02) 4921 5000 | CRICOS: 00109J

At a Glance		Student Cohort		Student Study Modes	
Total students	36,829	UG / PG	75% / 25%	Full-time / Part-time	80% / 20%
Non-school leavers (UG)	60%	Domestic / Int'l	90% / 10%	On-campus / Off-campus	60% / 40%
Campus(es)	Callaghan, NSW; Newcastle City Precinct, NSW; Ourimbah, NSW; Gosford, NSW; Sydney, NSW				

Interested in studying at University of Newcastle?

View their courses now on *The Good Universities Guide* website.

Scan this QR code to view all pre-degree, undergraduate and/or postgraduate courses offered by University of Necastle. Each course listing includes information about subjects, entry requirements, pathway options, fees and much more.

University of South Australia

www.unisa.edu.au | Ph: (08) 8302 6611 | CRICOS: 00121B

At a Glance		Student Cohort		Student Study Modes	
Total students	37,816	UG / PG	80% / 20%	Full-time / Part-time	65% / 35%
Non-school leavers (UG)	70%	Domestic / Int'l	90% / 10%	On-campus / Off-campus	5% / 95%
Campus(es)	Adelaide City East, SA; Adelaide City West, SA; Magill, SA; Mawson Lakes, SA; Mount Gambier, SA; Whyalla, SA				

University of Southern Queensland (UniSQ)

www.usq.edu.au | Ph: 1800 269 500 | CRICOS: 00244B (QLD)

At a Glance		Student Cohort		Student Study Modes	
Total students	24,701	UG / PG	75% / 25%	Full-time / Part-time	50% / 50%
Non-school leavers (UG)	80%	Domestic / Int'l	95% / 5%	On-campus / Off-campus	10% / 90%
Campus(es)	Ipswich, QLD; Springfield, QLD; Toowoomba, QLD				

University of Sydney

www.sydney.edu.au | Ph: 1800 793 864 | CRICOS: 00026A

At a Glance		Student Cohort		Student Study Modes	
Total students	77,431	UG / PG	55% / 45%	Full-time / Part-time	90% / 10%
Non-school leavers (UG)	20%	Domestic / Int'l	65% / 35%	On-campus / Off-campus	20% / 80%
Campus(es)	Camden, NSW; Camperdown/Darlington, NSW; CBD campus, NSW; Cumberland, NSW; Mallett Street, NSW; Rozelle (Sydney College of the Arts), NSW; Surry Hills, NSW; Sydney Conservatorium of Music, NSW; Sydney Medical School Campuses and Teaching Hospitals, NSW; Westmead, NSW				

University of the Sunshine Coast (USC)

www.usc.edu.au | Ph: (07) 5430 1234 | CRICOS: 01595D

At a Glance		Student Cohort		Student Study Modes	
Total students	18,251	UG / PG	90% / 10%	Full-time / Part-time	70% / 30%
Non-school leavers (UG)	45%	Domestic / Int'l	90% / 10%	On-campus / Off-campus	70% / 30%
Campus(es)	Caboolture, QLD; Fraser Coast, QLD; Gympie, QLD; Noosa, QLD; SouthBank, QLD; Sunshine Coast, QLD				

University of Tasmania

www.utas.edu.au | Ph: 1300 363 864 | CRICOS: 00586B (TAS); 03058B (NSW)

At a Glance		Student Cohort		Student Study Modes	
Total students	36,367	UG / PG	75% / 25%	Full-time / Part-time	45% / 55%
Non-school leavers (UG)	85%	Domestic / Int'l	90% / 10%	On-campus / Off-campus	30% / 70%
Campus(es)	AMC Launceston, Tas; Cradle Coast, Tas; Hobart, Tas; Launceston, Tas; Sydney - Darlinghurst, NSW; Sydney - Rozelle, NSW				

University of Technology Sydney (UTS)

www.uts.edu.au | Ph: (02) 9514 1711 | CRICOS: 00099F

At a Glance		Student Cohort		Student Study Modes	
Total students	43,251	UG / PG	75% / 25%	Full-time / Part-time	80% / 20%
Non-school leavers (UG)	40%	Domestic / Int'l	80% / 20%	On-campus / Off-campus	95% / 5%
Campus(es)	Sydney, NSW				

University of Wollongong

www.uow.edu.au | Ph: 1300 367 869 | CRICOS: 00102E

At a Glance		Student Cohort		Student Study Modes	
Total students	32,000	UG / PG	75% / 25%	Full-time / Part-time	80% / 20%
Non-school leavers (UG)	45%	Domestic / Int'l	70% / 30%	On-campus / Off-campus	95% / 5%
Campus(es)	Batemans Bay, NSW; Bega, NSW; Innovation Campus, NSW; Shoalhaven, NSW; South Western Sydney, NSW; Southern Highlands, NSW; Southern Sydney, NSW; Sydney Business School, NSW				

UNSW Sydney

www.unsw.edu.au | Ph: (02) 9385 1000 | CRICOS: 00098G

At a Glance		Student Cohort		Student Study Modes	
Total students	65,622	UG / PG	55% / 45%	Full-time / Part-time	85% / 15%
Non-school leavers (UG)	35%	Domestic / Int'l	75% / 25%	On-campus / Off-campus	95% / 5%
Campus(es)	Kensington, NSW; Paddington, NSW				

Victoria University (VU)

www.vu.edu.au | Ph: 1300 VIC UNI | CRICOS: 00124K

At a Glance		Student Cohort		Student Study Modes	
Total students	28,334	UG / PG	80% / 20%	Full-time / Part-time	75% / 25%
Non-school leavers (UG)	55%	Domestic / Int'l	65% / 35%	On-campus / Off-campus	95% / 5%
Campus(es)	City Flinders, VIC; City Flinders Lane, VIC; City King, VIC; City Queen, VIC; Footscray Nicholson, VIC; Footscray Park, VIC; St Albans, VIC; Sunshine, VIC; Sydney, NSW; Werribee, VIC				

Western Sydney University

www.westernsydney.edu.au | Ph: (02) 9852 5222 | CRICOS: 00917K; 02851G (WS, The College)

At a Glance		Student Cohort		Student Study Modes	
Total students	48,614	UG / PG	85% / 15%	Full-time / Part-time	75% / 25%
Non-school leavers (UG)	75%	Domestic / Int'l	90% / 10%	On-campus / Off-campus	65% / 35%
Campus(es)	Bankstown, NSW; Campbelltown, NSW; Hawkesbury, NSW; Lithgow, NSW; Nirimba, NSW; Parramatta City, NSW; Parramatta, NSW; Penrith, NSW; Sydney City, NSW; Sydney Olympic Park, NSW				

William Angliss Institute

www.angliss.edu.au | Ph: (03) 8595 5334 | CRICOS: 01505M

Campuses

Sydney, NSW; Melbourne, VIC

Interested in studying at William Angliss Institute?

View their courses now on *The Good Universities Guide* website.

Scan this QR code to view all pre-degree, undergraduate and/or postgraduate courses offered by William Angliss Institute. Each course listing includes information about subjects, entry requirements, pathway options, fees and much more.

You are now leaving *The Good Universities Guide*

Flip this book to check out *The Good Careers Guide* and learn about your career options and how to choose a path that best suits you.

Featuring
new in-demand jobs
from p22

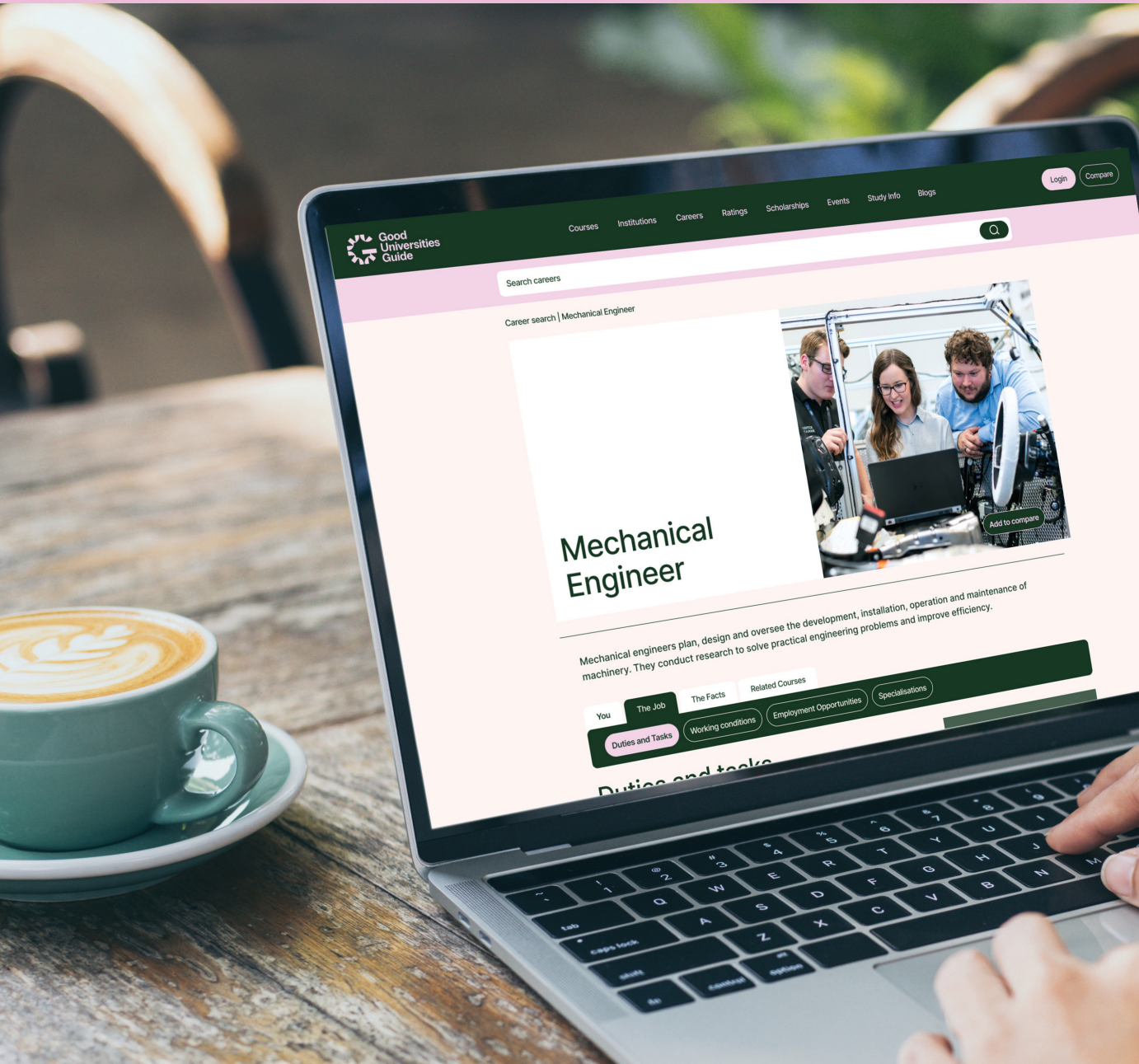
Take the next step in your career journey

The Good Careers Guide 2024

gooduniversitiesguide.com.au/careers-guide

Your future starts here

gooduniversitiesguide.com.au/careers-guide



Good Careers Guide

Good Education Media

Published by Good EDU Holdings

Printed and bound in China by Asia Pacific Offset.

All rights reserved. No part of this publication may be copied or reproduced, stored in a retrieval system or transmitted in any form or by any means — electronic, mechanical, photocopy, recording or otherwise — without the prior written permission of the publisher.

For information about distribution, publication orders and advertising sales, please contact us at **info@goodeducation.com.au**.

Newsagent distribution: ARE Direct

National Library of Australia
Cataloguing-in-publication data:
The Good Universities Guide and The Good Careers Guide 2024
ISBN: 978-1-921199-25-7
ISSN: 2653-6129 (Print)

The Good Careers Guide is researched and authored by Good EDU Holdings. All information is correct at the time of publication (August 2023).

The publishers and authors have attempted to ensure accuracy and completeness of the information contained in this publication; however, no responsibility can be accepted for any errors and inaccuracies that occur.

www.gooduniversitiesguide.com.au/careers-guide

The Good Careers Guide 2024

Section 1: Starting your career journey

What to research 5
Exploring types of work 6
Your training options 8
Where to find career advice 10
Looking for work 12
CV samples 14
Interview tips 16
The importance of soft skills 17

Section 2: Career descriptions

Making sense of our career descriptions 20
Career options across 23 fields of study 21

Section 3: Index

A-Z career descriptions index 341

The Good Universities Guide 352

Want to learn more about researching and choosing a career?

Find all that and more in *The Good Careers Guide* - just flip this book to check it out!

Section 1:

Starting your career journey

GET AN ELECTRICAL APPRENTICESHIP AT EGT!

Electrical Group Training (EGT) is the biggest employer of electrical apprentices in WA and recruit throughout the year.

EGT employs more than 500 apprentices who train in a range of electrical fields, including domestic, industrial, commercial and mining.

Benefits of being an EGT apprentice include:

- Wide variety of work and training
- Expert support and mentoring
- Job prospects in a range of industries
- Nationally recognised qualification
- Get paid while you learn

APPLY NOW AT EGT.NET.AU

Unit 14, 199 Balcatta Rd
Balcatta WA 6021
PO Box 782, Balcatta WA 6914

T: (08) 6241 6174
E: recruit@egt.net.au

ELECTRICAL GROUP TRAINING

Welcome

The Good Careers Guide is the ultimate resource of career and training information. It provides descriptions of over 400 jobs, plus tips to help you navigate the job-seeking process.

The career descriptions in this Guide list the most direct pathway to each profession, and generally cover entry-level roles and training. Postgraduate pathways are only included when they are required for entry into a profession.

Each person's career journey is different, with varied pathways, challenges and outcomes. Throughout your career, you will be influenced by different experiences and people — your plans may change once you leave school, commence study or enter your first job.

You can find more information at:

www.gooduniversitiesguide.com.au/careers-guide

Starting your career journey

To learn more about what kind of career might suit you best, ask yourself these questions:

1. **Interests**
   What am I passionate about and most interested in? Art, science or perhaps something more specific?

2. **Skills**
   What skills do I have, and what skills do I want to improve?

3. **Working style**
   Do I enjoy teamwork, or would I rather work autonomously?

4. **Lifestyle**
   Where do I want to live – rural/regional, in the city or overseas?

5. **Personality**
   Am I more introverted or extroverted? Do I prefer to lead or be led? Is structure important to me?

6. **Values**
   What matters most to me? Financial security, helping people, or something else?

What to research

Occupations

Browse job ads, speak to people in the industry (if possible) and read through the career descriptions in this book to get an idea of what your desired roles will entail. Consider:

- What would a person employed in this occupation do day-to-day? Does this match your interests?
- What skills, knowledge or attributes are required?
- What personal qualities are required? For example, many occupations in healthcare require technical and interpersonal skills.

Industry

Think about where the occupation fits within the context of your career journey. Ask:

- Is the industry in an area of growth or decline? Visit **labourmarketinsights.gov.au/industries** to learn more.
- What opportunities are provided for development, progression or professional accreditation?

Contact industry bodies or associations for further information about membership and training requirements.

Education and training

Chat to your teachers, career adviser, family and friends to get information about your careers of interest, and find out about pathways and progression opportunities.

- What type of training or study will you need to undertake to enter this occupation?
- How long does the course, training or licence take?
- What is the cost of training and how will you pay for it?

Employers

What businesses employ people in this occupation?

- Organise a work placement to gain insight into typical tasks, responsibilities and the work environment. This might be a short work experience stint over the holidays, volunteering, or a casual or part-time job.

Exploring types of work

We've outlined seven fields of work, the required skills and the tasks typically completed on the job. As you read through each section, tick the boxes next to occupations jobs that appeal to you — the category with the most ticks will help you decide the type of jobs to explore.

Once completed, hold your phone for a few seconds over the QR code in the section you scored highest in. This will direct you to the related careers on *The Good Universities Guide* website.

Analytic or scientific

These occupations focus on seeking solutions to scientific, technical, social or other issues. This includes observing, researching, analysing and interpreting results. Specialist knowledge and the ability to develop theories, apply logic and explore abstract ideas are important.

- ☐ Accountant
- ☐ Army Officer
- ☐ Civil Engineer
- ☐ Criminologist
- ☐ Electrician
- ☐ Exercise Scientist
- ☐ Information Technology Support Technician
- ☐ Journalist
- ☐ Medical Practitioner
- ☐ Radiation Therapist

Total ☐

Creative or artistic

These occupations focus on expressing, presenting or performing ideas in a creative way. This includes activities such as performing, writing, decorating and designing. Appreciation of style, form, design and related principles are important.

- ☐ Architect
- ☐ Chef
- ☐ Copywriter
- ☐ Fashion Designer
- ☐ Games Developer
- ☐ Illustrator
- ☐ Landscape Architect
- ☐ Media Presenter
- ☐ Teacher (Music, Art, Drama)
- ☐ Vehicle Painter
- ☐ Web Developer

Total ☐

Helping or advising

These occupations focus on helping, informing, teaching and treating people. This includes discussing people's personal issues or problems and providing advice, instruction or treatment to help them.

- ☐ Aged Care Worker
- ☐ Financial Planner
- ☐ Lawyer
- ☐ Nurse
- ☐ Nutritionist
- ☐ Paramedic
- ☐ Pharmacist
- ☐ Police Officer
- ☐ Social Worker
- ☐ Teacher

Total ☐

Practical or mechanical

These occupations focus on making, installing, fixing or adjusting things using your hands and include a range of practical and physical tasks. It's important to have an understanding of how relevant equipment and machinery works.

- [ ] Aerospace Engineer
- [ ] Air Force Officer
- [ ] Automotive Electrician
- [ ] Baker
- [ ] Construction Worker
- [ ] Farm Hand
- [ ] Hairdresser
- [ ] Operating Theatre Technician
- [ ] Plumber

Total ☐

Organising or clerical

These occupations focus on using data to order, process or retrieve facts and figures. They may include activities such as organising, updating or using information, developing or following procedures, and planning tasks in an organisation.

- [ ] Border Force Officer
- [ ] Business Systems Analyst
- [ ] Community Worker
- [ ] Events Coordinator
- [ ] Health Information Manager
- [ ] Office Administrator
- [ ] Property Manager
- [ ] Public Servant
- [ ] Surveyor
- [ ] Tourist Information Officer

Total ☐

Persuading or service

These occupations can focus on influencing, motivating, selling to and negotiating with people, as well as serving them. They include activities such as selling, promoting or providing goods or services, or bargaining or presenting a point of view.

- [ ] Administrative Assistant
- [ ] Advertising Account Executive
- [ ] Bank Officer
- [ ] Correctional Officer
- [ ] Flight Attendant
- [ ] Law Clerk
- [ ] Public Relations Officer
- [ ] Real Estate Salesperson
- [ ] Retail Buyer
- [ ] Waiter

Total ☐

Nature or recreation

These occupations focus on work in the natural world. They include tasks such as growing and caring for living things, developing and promoting sustainable environmental practices and administering sport and recreation activities.

- [ ] Agricultural Scientist
- [ ] Environmental Engineer
- [ ] Fitness Instructor
- [ ] Marine Biologist
- [ ] Park Ranger
- [ ] Stunt Performer
- [ ] Sustainability Officer
- [ ] Teacher (PE)
- [ ] Viticulturist
- [ ] Zoologist

Total ☐

Training options

Apprenticeships and traineeships

By combining practical work with structured training, apprentices and trainees gain a recognised VET qualification and theoretical knowledge while working in the industry.

To get started in an apprenticeship or traineeship, you will need to find an employer willing to take you on. Contact your local Australian Apprenticeship Support Network provider or Group Training Organisations.

School-based apprenticeships and traineeships

You can get a headstart on your training through a school-based apprenticeship or traineeship. Students work towards an apprenticeship or traineeship part-time while continuing with their schooling.

Pre-apprenticeships

Another common pathway into an apprenticeship is to undertake a pre-apprenticeship. This is completed at a lower qualification level and is shorter than an apprenticeship, which can provide insight into an industry or occupation before commencing further training.

Pre-apprenticeships may provide credit towards an apprenticeship.

Alternative apprenticeships

There are diplomas and advanced diplomas that you can do as an Australian apprentice across many different industries. Higher apprenticeships provide a pathway into university, and may even include associate degrees delivered within an apprenticeship model.

What's the difference?

- Apprenticeships usually run for three to four years, while a standard traineeship is 12 to 24 months in duration.
- An apprenticeship generally involves working towards a traditional trade, such as carpentry, while a traineeship provides training in areas such as IT, business, healthcare and finance.

Vocational and Educational Training (VET)

VET qualifications include certificates I to IV, diplomas, advanced diplomas, vocational graduate certificates and vocational graduate diplomas.

These courses give graduates the skills to:

- join the workforce for the first time
- re-enter the workforce after a break
- upgrade their skills in a chosen field
- change career paths
- enter higher education.

Training for VET can be completed either on or off the job. On-the-job training occurs in the workplace as part of your work. An assessor will visit you regularly to check that you are meeting competencies. Off-the-job training occurs away from the workplace, sometimes outside of working hours. It may take place at a TAFE institute, school or private training centre, or online via remote learning.

What can you study?

VET courses teach basic literacy and numeracy skills, vocational skills for particular occupations and semi-professional (or 'paraprofessional') training for lower-level roles in certain fields.

They are available in a wide range of study areas, from accounting, business and design to engineering, health services and science.

VET differs from higher education study because of its practical focus, shorter completion time and lower qualification levels.

If you are still at school, VET in Schools programs are great opportunities to commence study. They allow you to combine a vocational pathway with your schooling and work towards a certificate I, II, III or IV qualification.

Where can you study?

Technical and Further Education (TAFE) institutes are the main provider of VET, along with private Registered Training Organisations (RTOs). Some universities offer VET, including a number of dual-sector providers.

What are the entry requirements?

VET courses are typically very accessible, particularly at lower levels. In higher-level courses — including certificate IV, diplomas and advanced diplomas — completion of Year 10 or 12 is required. Most VET courses are available for full-time or part-time study, and some programs are available through online education. Additional requirements can range from tests, subject prerequisites and work experience to interviews or auditions.

Helpful websites

www.aapathways.com.au

www.australianapprenticeships.gov.au

www.apprenticeshipsupport.com.au

Where to find career advice

Whether you're exploring your study options, debating a career change or simply looking to re-enter the workforce, quality career advice is a valuable resource for all stages of your life. Here are four places you might wish to turn to for guidance and advice.

Career advisers and counsellors

Career specialists have expertise in all things education, work and training, so they are a great resource to utilise if you're after some genuine advice. By analysing your interests, skills and experience, career advisers can guide you towards work and study options that match up with your interests and abilities. You may even be exposed to study or career choices that you hadn't previously considered.

Many secondary schools have a careers teacher or specialist available for consultations, while higher education students may have career counselling services provided by their institution. If you are not studying, consider an independent practitioner. If you'd like more information on career counselling services, check out Australian Centre for Career Education or Career Development Association of Australia.

Online resources

A quick search of the web can link you up to a range of resources — career quizzes, aptitude tests, job search engines and blogs detailing the latest trends in the careers sector. You can match your skills to relevant career pathways, explore industries in demand and get tips on everything from landing your first job to upskilling in your career. Some useful career websites include myfuture, Your Career, CEAV Career Counselling Australia and SkillsRoad.

Your school, university or TAFE

Education providers tend to have a range of career advice services on offer to students, allowing you to access quality help when you need it. Your school careers teacher can assist you in creating a senior school subject plan and provide advice on potential university, vocational education and career pathways. Universities and TAFEs have careers hubs that equip students with a number of different services. These include career advice centres, career consultations, drop-in 'job shops' and mentoring programs.

Family and friends

Word of mouth can be a great way to explore your career possibilities and help you decide what jobs or study areas you might like to pursue. Your family and friends can act as a sounding board for you to bounce ideas and concerns, or even share their own career journeys and provide personal insight into certain jobs or industries.

Looking for work

Applying for jobs requires careful planning and research. Get started by working your way through the following steps.

Step 1: Prepare your CV

Your CV (or résumé) provides a summary of your skills, education and experience. A CV is often an employer's first impression of you, so it's important that it's clearly written, neatly presented and error-free.

Start by collecting information that will demonstrate your skills, abilities and experience to employers. It should cover your overall career plan, work history and education.

This might include referee details and reference letters; certificates and achievements; and job descriptions.

Now think about the attributes you can offer. In addition to technical abilities and qualifications, employers look for 'employability skills' that are necessary for successful participation in the workplace.

These can include:

- communications
- decision-making
- teamwork
- time management
- motivation
- creativity.

Think about situations where you've used your soft skills. Have you had to deal with a difficult co-worker or classmate? Have you successfully adapted to a new or challenging environment?

Creating your CV

A CV or résumé can take many different forms. Some employers prefer a design-heavy CV with graphic elements, while for others a simple, single-page Word document will suffice.

When creating your first CV, start with your contact details at the top, including your name, address, phone number and email address. You can arrange your CV under the following headings:

- Education
- Employment history
- Skills
- Referees

Your résumé is a living document and should be updated as you gain new skills, work experience and education. Make sure to have it checked for errors before sending to potential employers.

Step 2: Start your job search

There are many places to look for work. You will probably use one or more of these methods during your job search.

Employers

Don't be afraid to approach employers directly. Call, email or visit company websites to see if there are suitable vacancies. If they are not seeking applicants, you can leave or email your CV to them in case a position opens up.

Friends and family

Ask around to see if anyone has seen a job advertisement that suits your interests. Someone may know of positions at their workplace, or have heard of something elsewhere.

Online

Explore job search websites to find openings. These services allow you to filter your search based on areas you are interested in, as well as criteria such as location, type of work (full-time, part-time, casual or contract) and pay rate.

Step 3: Apply

Most job advertisements ask you to submit a formal application, which typically consists of a cover letter and CV. Some employers may ask you to address their key selection criteria.

Cover letter

A cover letter demonstrates to the employer why you are suitable for the role — it shows that you can and will do the job, and why you'll be a good fit for the team. It's their chance to get to know you before scheduling an interview.

Your cover letter should be adapted for every job application to highlight your relevant strengths, interest in the company and the advertised role. It should also include:

- your name, contact details and the date
- the name and address of the hiring or contact person, including their title and organisation name
- an appropriate salutation (for example, 'Dear Mr Smith')
- details of the role you are applying for
- the job reference number, where relevant.

The following pages show a cover letter and CV example.

Need some CV inspiration?

You can find ideas and templates for your CV through:

- Canva
- Seek's Career Advice page
- Microsoft Word and Google Docs templates.

Harriet Johnson
12 Bayview Street
South Melbourne VIC 3205
M: 0405 727 579
E: *h.johnston@email.com.au*

10 March 2023

Mr Daniel Gott
Store Manager, Maple Bay Clothing
131 Clements Street
Melbourne VIC 3000

Dear Mr Gott,

Please accept my application for the position of Sales Assistant at Maple Bay Clothing (Ref: MBC8740), as advertised on the Melbourne Careers online directory. I believe my previous experience in retail and interest in fashion and clothing make me well suited to this role.

I am a Year 12 student at South Melbourne Secondary College, where I'm studying English, Art, Further Mathematics, Business Management and a VET certificate in Applied Fashion Design and Technology. When I finish school, I would like to undertake further study in fashion.

I'm currently working as a retail assistant at APC Accessories, assisting customers to choose items, taking payments, replenishing floor stock and completing cleaning duties. I have also volunteered at several fashion events — most recently Melbourne Spring Fashion Week, where I assisted with packing gift bags and a range of customer service tasks.

The role of Sales Assistant at Maple Bay Clothing would allow me to continue developing my skills, as well as providing an opportunity to work in a field of interest.

I am available to work Friday nights and weekends and can begin following a notice period of two weeks with my current employer.

Thank you for considering my application. I look forward to hearing back from you.

Yours sincerely,

Harriet Johnson

Vincent Chen

12 Crew St, Auburn
NSW 2144
M: 0400 222 000
E: *v.chen@email.com*

EDUCATION

2019 - present

Auburn High School, Higher School Certificate

EMPLOYMENT HISTORY

October 2022 - present

Waiter

Auburn Hill Chinese Restaurant

- Greeting customers and seating them at tables
- Taking orders and placing them with kitchen staff
- Serving food and drinks
- Presenting bills to customers
- Processing payments via cash and EFTPOS
- Making and confirming reservations

November 2021 - October 2022

Cashier

Auburn Market

- Receiving, scanning and packing customers' goods
- Processing payments via cash and EFTPOS
- Restocking items
- Completing light cleaning duties

SKILLS

- Strong customer service skills, with experience in retail and hospitality environments
- Ability to handle cash and electronic payments, including use of cash registers and ordering systems
- Excellent verbal and written communication skills
- Positive attitude and ability to work well in team settings
- Strong leadership skills and initiative
- Excellent self-management, with the ability to work effectively in a busy environment
- Highly developed computer skills, including advanced knowledge of Microsoft Office programs

REFEREES

Cindy Lee
Restaurant Manager
Auburn Hill Chinese Restaurant
Ph: (02) 9122 5555
E: *c.lee@auburn.com.au*

Mark Thompson
Supervisor
Auburn Market
Ph: (02) 9122 6666
E: *mark@auburnmarket.com*

Step 4: Interviews

A job interview is your chance to show the employer why you are the best candidate for the role. Employers will want to make sure that you have the skills, experience, qualifications and attributes required by the role. Motivation and 'team fit' are also very important.

Before the interview

Careful preparation is important. Before an interview, you will need to:

- research the organisation, including its products and services
- prepare questions about the role, organisation and industry
- practise your interview skills with a friend or a family member
- re-read the job advertisement, cover lettter and résumé used in your application.

It's a good idea to familiarise yourself with common interview questions. These include:

- Can you tell us a bit about yourself?
- What attracted you to this position and organisation?
- What would you bring to this role?
- What are your strengths and weaknesses?
- What challenges have you faced in a work or school setting — and how did you approach them?

Your interviewer will also expect you to have prepared your own questions, whether they are about the role, team structure or future progression. This shows that you are proactive and interested in joining the organisation.

At the interview

Your interviewer will understand that you are nervous and will try to make you feel more comfortable. Follow these tips to make a good impression:

- Plan your journey in advance, ensuring you allow extra time for traffic or public transport delays. If you are running late, call your interviewer as soon as possible and provide an estimated arrival time.
- Be sure to look attentive and maintain eye contact with your interviewer.
- Be confident about your skills, experience and suitability for the role. When talking about your experience and achievements, use action words such as 'delivered' or 'improved'. Use and practise the STAR (situation, task, action and result) method to answer any behavioural questions.
- Take time to formulate a thoughtful answer to each question. If you don't understand a question or would like your interviewer to repeat themselves, don't be afraid to ask.
- Thank your interviewer for their time (by their name, if possible) and demonstrate your interest by asking about the next stage of the selection process.

After the interview

When you leave the interview, allow yourself some time to relax and debrief. You will usually hear from your interviewer within a week or two. If you haven't heard from them within a reasonable period, it's a good idea to follow up with a polite phone call. If you weren't successful, ask for feedback — this will help you with your next interview.

Don't despair if you don't secure a job straight away — even after several interviews. The process can take time. The effort of researching jobs and organisations, applying for positions, meeting with employers and seeking feedback is all worth it in the end.

Interview tips

Turn off your phone (or turn it to silent).

Dress well and appropriately. A suit and tie aren't often necessary. But think about how you can dress suitably and comfortably to present your best self.

Be aware of your body language. Gestures, body movements, eye contact and posture are often louder than your words.

The importance of soft skills

In contrast to a formal qualification, soft skills — things you don't typically learn at uni — can be what sets you apart in the job market. Soft skills are considered to have more nuance, take longer to develop and are harder to acquire. But which soft skills should you focus on developing, and what do employers care about?

Growth mindset

This skill promotes the idea that we can get better at or improve our ability in anything we put the effort into. A person with a growth mindset will believe their skills can be developed through hard work, strategy and feedback from others.

A growth mindset goes together with ambitious goal setting and achievement, so it's no surprise that it's a very popular skill for career progression in all industries and at all levels.

Creativity

The world needs innovative leaders with new ideas, and creativity is a crucial element in problem-solving. What was once considered an innate skill of those in artistic professions, creativity has now shown to be a key factor in all industries. Creativity courses specialise in areas like innovation and business, idea generation, coding, lateral thinking and harnessing your imagination.

Focus mastery

In a world full of distractions and technology at our fingertips, staying focused has never been more of a challenge — but with more people working from home than ever before, it's also become more important.

Innovation

As many businesses and individuals need to adapt their products and business models, there is an increasing need for innovation. While many may think of innovation in relation to new technology, it also refers to finding new ways to do things. You can take courses in innovation that tie in with themes such as creativity, design thinking and leadership.

Communication

Encompassing many elements of work life, communication is a skill that can refer to public speaking, emails, one-on-one discussions, meetings and presentations. Good communication can build trust, propel projects forward and improve morale. At a management level, it's essential for delegation, conflict resolution and project management in general. You can sharpen your communication skills to improve your assertiveness, business acumen or confidence.

Where to learn soft skills

One popular way to develop your soft skills is through a MOOC (Massive Open Online Course) — a free online course available to anyone. Many universities have developed their own MOOCs, as well as independent websites like Udemy, edX, Coursera, Udacity and LinkedIn Learning.

Section 2:

Career descriptions

Career descriptions

This section contains over 400 career descriptions, including the most direct routes to the required qualifications. Below is an explanation of the icons and categories used to outline certain aspects of each role.

Icons

Median weekly salary

The median earnings for full-time, non-managerial employees paid at the adult rate before tax, including amounts of salary sacrifice. These figures are a guide only and should not be used to determine a wage rate.

Skill level

Skill level ratings are based on the range and complexity of job tasks. In general, the higher the skill level, the more formal education and training, previous experience or on-the-job training needed to be good at the job. Entry level jobs often need no prior training or experience.

Future growth

The likely percentage change of job growth compared with all other occupations. Possible growth ratings in this Guide are: very strong, strong, moderate, stable and decline.

Job categories

Career name

This is what the career is typically called in job advertisements, but we also offer some alternatives. Some roles can come under many different names, and often job names evolve with business trends.

Tasks

This is a list of a range of the duties that may be required in the role. This list isn't designed to be exhaustive, and often the scope of a role will be affected by the size of a business, the industry and the experience a person brings to it.

Specialisations

There may be room to progress and develop a more niche set of skills within the role. Often these specialisations are the result of further study; however, it can also be due to experience and achievement.

Personal requirements

Certain roles will be more suited to certain personality traits — we list some common qualities and skills found in those who perform this job or work in the wider industry.

Education and training

This section outlines the education requirements for each role. Often there is more than one route to a career — this section will present the most common and direct paths.

Employment opportunities

This is where you will find information about where the career path may lead. Some jobs offer a wide range of options, while roles with more vocational training, such as dentist, have less room to move laterally.

Related jobs

If this role isn't exactly right for you, refer to the similar skills and qualifications listed here.

View careers by field of study

Careers in this section are organised into various fields of study that are shown below. Each field of study includes an overview of institutions that offer relevant degree-level courses. Our ratings show which institutions get the best ratings from graduates in each field, and which institutions produce the best graduate outcomes.

Agriculture & environmental studies 26
Architecture & building 41
Business & management 48
Communications 68
Computing & information systems 78
Creative arts 92
Dentistry 114
Education & training 120
Engineering & technology 134
Government & public service 150
Health services & support 165
Humanities & social sciences 182
Law & paralegal studies 193
Medicine 198
Nursing 208
Pharmacy 214
Psychology 218
Rehabilitation 222
Science & mathematics 230
Social work 247
Tourism, hospitality, sport & leisure 253
Trades & services 275
Veterinary science 333

If you're looking for a specific career, please search the index on page 341.

Universities compared

The 'five-star universities' tables show the institutions whose results place them in the top 20 per cent of universities in each field of study. These ratings are based on the proportion of students in a given field of study who were satisfied with their institution's performance in:

- Overall quality of educational experience
- Teaching quality
- Learner engagement
- Learning resources
- Student support
- Skills development.

The tables also show universities in the top 20 per cent for employment outcomes, including the proportion of graduates who gained full-time employment and the median salaries of graduates.

Data has been sourced from the Quality Indicators of Learning and Teaching (QILT) and is based on the results from the Student Experience Survey and Graduate Destination Survey.

In-demand career additions to the Guide

What are the jobs that are emerging and those that are steadily in-demand in Australia? In this Guide, we are introducing eight new jobs that belong to either of the above categories. One thing's for sure, all of them are highly sought after.

LinkedIn released its 2023 LinkedIn Jobs on the Rise list in early 2023. Most of the listed careers belong to the field of IT and computing, giving you a tiny glimpse of the future world of work.

How did LinkedIn get this insight, you ask? The company 'uses unique LinkedIn data to uncover the ... fastest-growing job titles over the past five years — providing insight into where long-term opportunity lies and where the workforce is headed.'

The good news is, some of these jobs are accepting candidates from a wide range of academic qualifications, from high school to masters degrees or higher.

We flesh them out further on the following pages, on top of other jobs that have continued to be in high demand in Australia, such as specialist nurses and child carers.

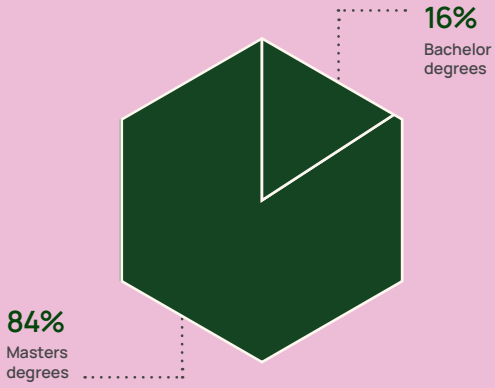
Learn more about them in this Guide.

Computing and Information Systems

Machine learning engineer

Machine learning engineers develop progressive computer codes and IT systems that behave like artificial intelligence (AI). They are built to continuously learn and make autonomous predictions, such as facial recognition and speech recognition software.

Learn more on page 85.

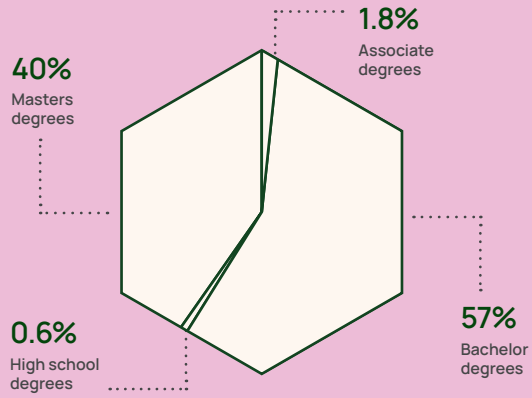


Education share

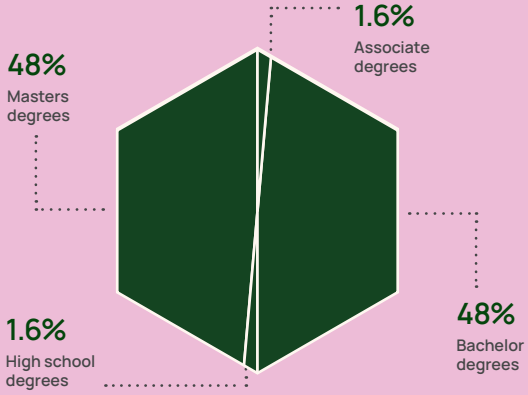
Site reliability engineer

Site reliability engineering is a promising field in Australia, with growing demand for skilled professionals who can ensure the reliability and scalability of IT systems. A career as a site reliability engineer requires a combination of technical expertise, problem-solving skills and communication skills.

Learn more on page 87.



Education share



Education share

Technical program manager

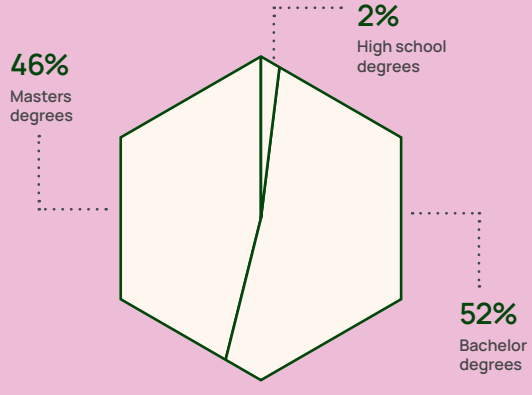
Technical program managers are responsible for overseeing multiple related technical or IT projects for their organisation. They ensure that each project is aligned with the objective and provide guidance to individual project managers.

Learn more on page 89.

Platform engineer

Platform engineers are responsible for designing, building and maintaining an organisation's cloud platforms. This allows software engineers and other IT professionals to safely execute and run their software.

Learn more on page 86.



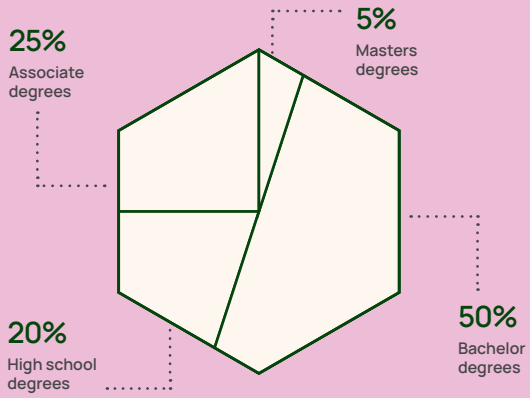
Education share

Nursing

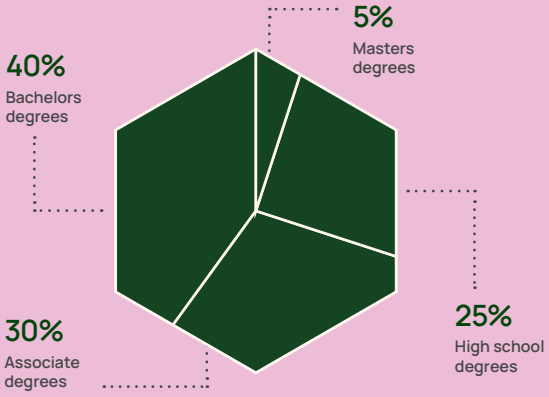
Mental health nurse

Mental health nurses have diverse responsibilities, aimed at supporting and promoting the mental wellbeing of individuals. They employ their expertise in assessment, therapy and medication management to facilitate recovery, and empower individuals to achieve optimal mental health. Through their dedication and empathy, they make a significant impact in the lives of those struggling with mental health challenges.

Learn more on page 210.



Education share



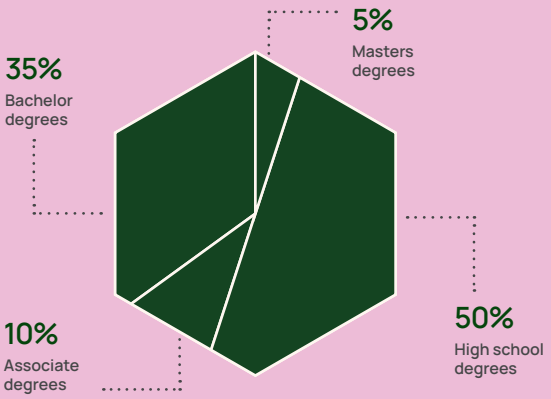
Education share

Aged care nurse

Aged care nurses play a vital role in providing specialised care and support to elderly individuals. With their expertise in geriatric nursing, they ensure the wellbeing and quality of life of the elderly population. Individuals can embark on a rewarding career path, whether specialising in dementia care, palliative care, rehabilitation, community aged care or pursuing management roles.

Learn more on page 210.

Social work



Education share

Child carer

Child carers play a vital role in nurturing and shaping the lives of children. They create a safe and supportive environment that facilitates children's growth, learning and wellbeing.

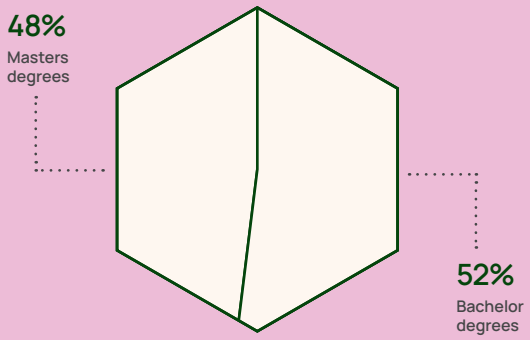
Learn more on page 249.

Rehabilitation

Clinical exercise physiologist

Clinical exercise physiologists typically work in hospitals or clinics alongside other healthcare professionals. They design and manage exercise and lifestyle programs for people with various health conditions. These programs are tailored to individual needs.

Learn more on page 224.



Education share

Please note that the education share percentages are approximate and may vary based on individual circumstances and specific roles within each profession.

Agriculture & environmental studies

Agriculture and environmental studies is a small but varied field — and certainly not just for future farmers. These courses are intellectually stimulating, and many combine traditional science with social science.

Courses and specialisations

Agriculture

Although agriculture is a highly specialised field of study, it offers diverse options. Some of the majors include agribusiness, animal behaviour, aquaculture and equine science.

Some courses cover the 'basics' — such as crop and animal science — but many explore areas that show you how to create a profitable business.

Environmental studies

Other majors you can study include conservation, ecology, environmental science, landscape management, marine studies, sustainable resource management and wildlife and conservation biology.

Where to study

Courses in this field are scattered around the country, with many at regional universities or rural campuses of metropolitan universities. Some specialisations will be better suited for study in particular parts of the country, such as tropical agriculture in the north. Make sure the facilities suit your specialisation before making a decision.

Entry difficulty is not typically a deciding factor, as most courses are fairly accessible. Some will require or allow students to live on campus. Some courses may skip formal prerequisites, while others will require subjects like English, mathematics and various science disciplines.

Five-star universities

Educational experience

TASMANIA	92.3%
UniSA	87.9%
DEAKIN	86.0%
ANU	85.2%
ADELAIDE	85.2%
SUNSHINE COAST	84.7%

National average
83.1%

Graduate employment

CSU	86.6%
TASMANIA	86.1%
UNE	83.8%
LA TROBE	82.5%
CQUni	81.6%

National average
74.6%

Learner engagement

CURTIN	72.5%
UniSA	72.4%
VU	72.1%
SUNSHINE COAST	68.9%
ADELAIDE	68.5%

National average
43.4%

Learning resources

WOLLONGONG	95.6%
FLINDERS	93.3%
DEAKIN	92.6%
ANU	91.6%
UniSA	91.1%
ADELAIDE	90.8%

National average
86.4%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

7,877
Undergraduate

6,990
Postgraduate

1,055
International undergraduate

What can I do?

- Winemaking and viticulture
- Animal nutrition
- Research
- Quarantine
- Farm management
- Policy and advice

Graduate starting salary

$45,700
Undergraduate

$59,700
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

74.6%
Undergraduate

78%
Postgraduate

Five-star universities

Median starting salary

CANBERRA	$59,700
WOLLONGONG	$58,600
CDU	$57,500
ACU	$56,600
CSU	$56,600
WESTERN SYDNEY	$56,600

National average
$45,700

Skills development

CURTIN	92.3%
SOUTHERN CROSS	92.0%
WOLLONGONG	89.8%
ANU	89.2%
DEAKIN	89.0%

National average
79.4%

Student support

WOLLONGONG	86.8%
UniSA	86.7%
TASMANIA	85.5%
SUNSHINE COAST	84.3%
DEAKIN	82.1%

National average
78%

Teaching quality

TASMANIA	93.2%
UniSA	91.4%
VU	89.6%
SUNSHINE COAST	89.4%
DEAKIN	89.1%
ANU	88.7%
MACQUARIE	88.6%

National average
86.4%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Agricultural Scientist

Agricultural scientists study commercial plants, animals and cultivation techniques to improve the productivity and sustainability of farms and agricultural industries.

Agricultural scientists:

- collect and analyse data and samples of produce, feed and soil, and study other factors affecting production
- advise farmers and farm managers about techniques for improving the production of crops and livestock
- advise farmers about issues such as livestock and crop disease, control of pests and weeds, soil improvement, animal husbandry and feeding programs
- study environmental factors affecting commercial crop production, pasture growth and animal breeding
- study the effects of cultivation techniques, soils, insects and plant diseases on animal and crop production
- develop procedures and techniques for solving agricultural problems and improving the efficiency of production.

Agricultural scientists may work in laboratories, in offices, in the field or in a combination of these. Some work alone but most work as members of a team alongside other scientists, farmers and other people involved in providing services to the agricultural industry.

Agricultural scientists who specialise in the wine industry deal with the research and production of wines and the microbiology and chemistry of winemaking. see the separate entry for Winemaker for more information.

Specialisations

- Agricultural Adviser
- Agricultural Biotechnologist
- Agricultural Entomologist
- Agricultural Microbiologist
- Agronomist
- Animal Scientist
- Crop Physiologist
- Horticultural Scientist
- Soil Scientist

Personal Requirements

- Able to analyse and solve problems
- Interested in science and the environment
- Able to make accurate observations
- Good oral and written communication skills
- Good organisational skills, with supervisory ability
- Able to work as part of a team

Education and Training

To become an agricultural scientist you usually have to complete a degree in agricultural science, or a science degree with a major in agriculture-related studies. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, biology, chemistry, mathematics and physics are normally required. A number of universities in Australia offer degrees in these areas.

Additional Information

Graduates of agricultural science or a related discipline may apply to become members of Ag Institute Australia.

Employment Opportunities

Employers include state, territory and federal government departments, and the private sector. Careers are usually in research, advisory roles, teaching, management, administration, marketing and media. Agricultural scientists may work in horticulture and with flower growers, nursery operators and commercial firms trading in horticultural products such as frozen foods, seeds and fertilisers. They may also work in the field of landscape design and in the mining industry to assist with land regeneration.

Although employment opportunities exist overseas, positions usually require postgraduate qualifications or work experience.

Related Jobs

Agricultural Engineer (p 136); Biotechnologist (p 234); Environmental Engineer (p 141); Farmer (p 33); Forester (p 34); Park Ranger (p 158); Primary Products Inspector (p 312); Veterinarian (p 337); Zoologist (p 338).

Agricultural Technical Officer

Agricultural technical officers provide complex technical support and advise on aspects of agriculture such as research, production, servicing and marketing.

Agricultural technical officers:

- work with agricultural scientists using small plot experiments to compare plant varieties and test the effects of various treatments on growth and yield
- work with soil scientists to study irrigation techniques and analyse plants used in soil treatment experiments
- work with plant breeders to produce new strains and select superior products
- work with animal breeders using artificial insemination techniques to produce offspring that mature earlier
- record and interpret experimental data in field experiments
- interpret aerial photographs and prepare maps showing soil and vegetation patterns

Bachelor of Agriculture
Help secure a sustainable future
Learn how to apply science, technology and business to solve some of the world's most critical sustainability issues.
study.unimelb.edu.au
POSTERA CRESCAM LAUDE
THE UNIVERSITY OF MELBOURNE
CRICOS 00116K

- assist in the chemical analysis and laboratory culture of microorganisms that cause diseases in plants and animals
- carry out research and provide advice about various technical issues.

Agricultural technical officers may work in laboratories, in the field or both. They often work in a team with other scientists.

Specialisations

- Artificial Insemination Technical Officer
- Horticultural Technical Officer
- Poultry Technical Officer

Personal Requirements

- Able to analyse and solve problems
- Enjoy agriculture and the environment
- Able to make accurate observations and recordings
- Able to work as part of a team
- Enjoy working outdoors

Education and Training

To become an agricultural technical officer you usually have to complete a VET qualification in agriculture, horticulture, sustainable agriculture or animal technology. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you have a degree in agricultural science, or a science degree with a major in agriculture-related studies. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required.

Employment Opportunities

Agricultural technical officers are employed by state, territory and federal government departments, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) pastoral companies, agricultural chemical manufacturers. and farm consultancies.

In the past, government organisations were the major employers of agricultural technical officers. However, government positions are now often offered as short-term contracts based on project funding. Much of the work has been contracted out to private businesses and consultancy practices.

Related Jobs

Agricultural Engineer (p 136); Agricultural Scientist (p 28); Animal Technician (p 232); Biotechnologist (p 234); Environmental Engineer (p 141); Farmer (p 33); Food Technician (p 236); Food Technologist (p 237); Forester (p 34); Horticultural Tradesperson (p 300); Landcare Worker (p 36); Science Field Officer (p 245).

Aquaculture Technician

Also known as Fisheries Technical Officer and Fisheries Technician

Aquaculture technicians are involved in freshwater and marine farming and hatchery management, as well as research into farmed species. They can be involved in equipment design, site development and research, and the harvesting, processing and shipment of products.

Aquaculture technicians:

- breed and raise marine organisms such as fish, eels, crustaceans, shellfish, pearl-producing shellfish, algae, crocodiles and turtles in artificial conditions
- identify common diseases in fish and shellfish, and take the necessary steps to prevent problems that may occur in intensive farming
- assist with experiments relating to nutrition or methods of controlling predators, parasites and other disease-causing organisms
- monitor the environment using oxygen meters, salinity meters, pH (acidity) meters and water chemistry analysis kits
- maintain live feed and algae cultures
- keep records of breeding, production and treatment programs
- develop and implement systems of profitable farm management.

Aquaculture technicians work outdoors in all kinds of weather. They may also work in a hatchery or laboratory. The work can be located in isolated areas and heavy lifting may be required. Shiftwork is common, including on weekends and public holidays.

Personal Requirements

- A practical approach to work
- Enjoy science
- Good observational skills
- Enjoy outdoor work
- Able to cope with the physical demands of the job
- Aptitude for working with computers

Education and Training

To become an aquaculture technician you usually have to complete a VET qualification in aquaculture. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become an aquaculture technician through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Aquaculture technicians can be employed in a range of positions, including as a fish farm worker, fish farm nutritionist and hatchery or pond technologist. They may work as owner-managers of aquaculture farms or find employment with state and territory fishery authorities, tertiary institutions, industrial organisations, private hatcheries and fish farms or research organisations such as the Commonwealth Scientific and Industrial Research Organisation (CSIRO).

Related Jobs

Biotechnologist (p 234); Farmer (p 33); Fisheries Officer (p 33); Laboratory Worker (p 240).

Beekeeper

Also known as Apiarist

Beekeepers operate beehives to produce honey and related products such as beeswax, pollen, royal jelly, propolis (bee glue and bee antiseptic) and queen bees, and to pollinate seed, fruit, nut and vegetable crops. Beekeepers also operate beehives to assist with the pollination of seed, fruit, nut and vegetable crops.

Beekeepers:

- build or put together parts of ready-made beehives
- treat and paint beehive parts to prevent wood rot
- negotiate with property owners and government agencies for sites on which to keep their bees

- transport hives to sites that have been assessed for honey or pollen production potential
- insert sheets of wax stamped with a honeycomb imprint into frames to be placed into hives
- remove honeycomb from the hive and extract honey
- look after and repair beehives and honey-extracting equipment
- control bee diseases, pests and parasites in working hives
- re-queen colonies and raise queen bees for their own use or sale
- negotiate with farmers to provide pollination services in the growing of nut, fruit, seed and vegetable crops
- process and clean beeswax
- package and sell honey, pollen, propolis and beeswax.

Beekeepers travel a lot, examining honey and pollen flora and transporting beehives by truck from site to site as plants start flowering. Much of their time is spent outdoors and away from home. Many wear protective clothing such as overalls, gloves and hats with nets attached to protect their faces.

After gaining adequate experience, beekeepers may choose to focus on one of four main industry segments: apiary, queen bee production, marketing and packing, or pollination. Some may specialise as apiary inspectors or advisers, or laboratory diagnostic technicians.

Personal Requirements

- Enjoy botany (plants) and entomology (insects)
- Free from allergies and able to work with bees
- Able to work in isolated areas
- Willing to work long and irregular hours
- Able to lift heavy weights
- Happy to work alone
- Able to keep accurate records

Education and Training

You can work as a beekeeper without formal qualifications, but employers usually require Year 10. You will probably get some informal training on the job. Entry to this occupation may be improved if you have qualifications and you may like to consider a VET course. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Some previous beekeeping experience gained through hobby activities, as well as some knowledge of botany and skills in woodwork and metalwork, may also be an advantage. Work experience with a commercial operator is recommended.

Additional Information

Beekeepers are required to register with the environmental or primary industries department in their state or territory.

Employment Opportunities

Commercial beekeepers require at least 500 beehives in order to make a living. These hives are moved many times throughout the year to take advantage of flowering times in different parts of the country. Work may be seasonal.

The increasing local demand for queen bees and packaged bees may provide some additional part-time positions. The cost of a full commercial venture is high, covering hives, trucks and associated extracting equipment. Beekeepers usually purchase a small plot of land (about two hectares) in an area of low human population to accommodate building honey-extraction equipment and storage sheds, a workshop and living quarters.

Related Jobs

Botanist (p 234); Farmer (p 33); Horticultural Tradesperson (p 300); Primary Products Inspector (p 312).

Climate Change Analyst

Climate change analysts create mathematical models to predict environmental changes. Their work is used to educate and inform policy and planning surrounding climate change, renewable energy and energy efficiency.

Climate change analysts:

- analyse research findings to inform legislators, regulatory bodies and other stakeholders
- prepare study reports and written materials for government and environmental groups
- gather and review climate-related studies
- write reports and academic papers regarding climate-related studies

Climate change analysts work mainly indoors. They spend a substantial amount of time in front of the computer analysing data and writing papers. A climate change analyst's job may include a large policy or public education component.

Personal Requirements

- Strong reading, writing and comprehension skills
- Good written and verbal communication skills
- Able to think logically and analytically
- Imaginative, with skills in creative reasoning
- Able to work independently or as part of a team
- Good oral and written communication skills
- Able to accept responsibility
- Willing to continually update skills and knowledge

Education and Training

To become a climate change analyst, you usually need a degree in environmental science. These subjects place heavy emphasis on statistical and analytical skills. To get into these courses, you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

A climate change analyst can work in both the private sector or the public sector, providing reports and analysis. Their work can inform policy changes and business decisions, as well as educate people. In the private sector, they can be employed by oil and mining companies, undertaking impact studies and studying data to produce reports that can influence a business' activities and profitability. In government, a climate change analyst may work on reports to guide regulation decisions and infrastructure projects.

Related Jobs

Economist (p 56); Environmental Scientist (p 31); Meteorologist (p 242).

Environmental Health Officer

Also known as Health Inspector and Health Surveyor

Environmental health officers assess risk and develop, regulate, enforce and monitor laws and regulations governing public health for both the built and natural environment, in order to promote good human health and environmental practices. Environmental health officers may specialise in the areas of air, food and water

quality; disease vector control (mosquito control, for example); waste management; environmental protection; health education; and noise control.

Environmental health officers:

- investigate complaints about food safety and ensure shops, restaurants and food processors follow health regulations
- monitor and control water, air and noise pollution and collect water samples for analysis
- initiate and conduct environmental health impact or risk assessments
- design and conduct health education programs or public information campaigns
- prepare policy documents and guidelines relating to environmental health matters
- manage immunisation campaigns
- manage programs to control disease-causing pests such as mosquitoes
- investigate and manage public health incidents such as disease outbreaks
- manage programs to control public health and environmental issues associated with major public events
- respond to disasters and emergency situations where public health is at risk
- assess building development applications and inspect houses and public buildings to ensure they comply with environmental or health and safety standards
- inspect and license premises that may present infectious disease risks to the community (such as tattoo parlours and acupuncturists, where skin penetration and body piercing occurs), and inspect hairdressing and beauty salons
- maintain records, prepare statistics, write reports and give evidence in court cases where health or environmental regulations have been violated.

They are also involved in consultation, evaluation, managerial and health promotion activities.

Personal Requirements

- Good communication skills
- Good negotiation skills
- Tactful and courteous
- Able to be firm and impartial when making decisions
- Resourceful
- Able to take initiative
- Good problem-solving skills
- Able to work independently or as a part of a team

Education and Training

To become an environmental health officer you usually have to study environmental health, environmental science, public health or environmental management at university. These areas of study may be undertaken within a science, health science, social science or natural science degree. To get into these courses you usually need to gain your Senior Secondary Certificate of Education.

Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Graduates can become members of Environmental Health Australia, a national professional association for environmental health officers and other professionals working in environmental health. Student membership is available to those studying an accredited environmental health degree.

Employment Opportunities

The main employers are local government and councils. Environmental health officers are also employed by the Australian Defence Force, state and territory health and environment departments and area health services, as well as major food corporations, international airlines and overseas aid organisations. There are growing opportunities elsewhere in the private sector.

Related Jobs

Border Force Officer (p 153); Occupational Health and Safety Officer (p 178); Primary Products Inspector (p 312); Quality Assurance Inspector (p 314).

Environmental Scientist

$1,779 | Very high skill | Strong

Also known as Environmentalist

Environmental scientists measure and record features of the environment and study, assess and develop methods of controlling or minimising the harmful effects of human activity on the environment.

Environmental scientists:

- plan and conduct research into the physical and biological nature of the environment
- undertake laboratory work
- monitor the environmental impacts of development activities
- conduct research and prepare proposals to minimise the impact of industrial, agricultural and urban processes on the environment
- develop conservation plans
- investigate and report on breaches of environmental guidelines
- run community education programs
- assist with environmental emergencies, such as chemical spills and accidents
- analyse pollutants, identify their sources and assess their effects on the environment

- monitor the effects of pollution and land degradation, and recommend ways of prevention and control
- rehabilitate land, water and air affected by mining, logging, construction, degradation or pollution
- research matters of immediate and long-term importance to governments and communities, such as the impact of land clearing on native animals and the impact of waste products on waterways
- negotiate with, and provide advice to, industry, government and the public on environmental matters, such as the management, re-use or disposal of hazardous materials
- assist with the development of environmental policies, strategies and codes of practice
- conduct environmental audits.

Environmental scientists usually work with a range of other professional and technical staff. The amount of indoor and outdoor work they do depends on the individual job.

Specialisations

- Ecologist
- Environmental Officer

Personal Requirements

- A logical approach to problem-solving
- Aptitude for technical tasks
- Good communication skills
- Able to work as a part of a team

Education and Training

To become an environmental scientist you usually have to complete a degree in environmental science, science or applied science with a major in environmental science, natural resource management, geography, marine science or a related field. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry, physics, and earth and environmental science are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Environmental scientists may be employed by federal, state and territory government departments; statutory authorities; and local councils. They may also find employment with engineering and environmental consultants or in areas such as the minerals and energy industries or climate change research.

In recent years, national landcare initiatives have led to the creation of new positions for environmental scientists within state and territory agriculture departments.

There are also opportunities for self-employment as consultants, as well as in secondary and tertiary teaching.

Some employers have indicated a preference for environmental scientists who have at least four years of training.

Related Jobs

Agricultural Engineer (p 136); Agricultural Scientist (p 28); Biotechnologist (p 234); Botanist (p 234); Chemist (p 235); Environmental Engineer (p 141); Environmental Health Officer (p 30); Geologist (p 239); Hydrologist (p 36); Marine Biologist (p 241); Microbiologist (p 243); Pharmacologist (p 216); Toxicologist (p 207); Urban and Regional Planner (p 46); Viticulturist (p 39); Winemaker (p 39); Zoologist (p 338).

Farm Hand

Also known as Station Hand

Farm hands assist farmers and graziers with growing crops and feeding and raising livestock.

Farm hands:

- cultivate soil, sow crops and control weeds by slashing, rotary hoeing or chemical spraying
- plant ground crops between rows of trees and bushes to control weeds and soil temperatures
- construct wire trellises (frames) to support vines, berries and fruit
- take part in harvesting operations using tractors, harvesters, forklifts and hand tools
- feed livestock and poultry
- prepare milking machinery and assist with milking operations
- clean and sterilise farm equipment
- clear away animal waste and hose out operational areas
- perform other tasks involved with the breeding and raising of livestock, such as shearing, dipping, branding, crutching, gelding, marking and assisting with artificial insemination
- ride horses or motorbikes to muster sheep or cattle
- maintain and repair farm buildings, bores, fences, machinery, troughs, windmills and other equipment.

Farm hand work can be physically demanding. During lambing, calving, mustering, harvesting or fruit picking time, farm hands may be required to work long and irregular hours. Accommodation may be provided by the employer on the property.

Personal Requirements

- Enjoy practical work
- Able to cope with the physical demands of the job
- Able to undertake manual and heavy work
- Able to handle animals with confidence and patience
- Enjoy working outdoors
- Able to work for long hours and in all kinds of weather conditions
- Able to work both in a team and with limited social contact
- Mechanical aptitude

Education and Training

You can work as a farm hand without formal qualifications. You will probably get some informal training on the job.

You can also become a farm hand through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

There are opportunities to progress quickly, once skills are obtained, and to specialise in certain areas, including agribusiness enterprises.

Skilled farm hands may undertake further study and, in time, become farm managers, enter into share-farming partnerships or purchase their own farming operation. Others go on to work in businesses and government agencies that service rural communities and farmers/farm managers.

Related Jobs

Animal Attendant (p 335); Farmer (p 33); Horticultural Tradesperson (p 300); Stock and Station Agent (p 66).

Farmer

Also known as Crop Farmer , Farm Overseer , Livestock Farmer and Musterer

Farmers and farm managers undertake farming operations to raise livestock and cultivate crops, fruit, vegetables and other agricultural products.

A farmer is a self-employed person who farms their own land or a leasehold property rented from a landowner.

A farm manager is an employee who is paid a salary to manage a farm or group of farms.

Farmers and farm managers may specialise in enterprises such as cropping or horticulture. Others work with animals such as beef or dairy cattle, sheep, pigs or poultry. Many farmers and farm managers conduct mixed farming operations.

Farmers and farm managers:

- decide or advise on the kind of crops to be grown, the area to be sown or planted and the livestock to be raised
- plan the type of farming activities to be undertaken, estimate operating costs and order supplies such as seed, fertiliser, livestock fodder and farm equipment
- recruit and coordinate farm workers and direct them on crop growing and livestock raising
- plant, spray, fertilise, harvest and sell crops
- handle, load and transport livestock for showing, slaughter or sale
- clean and maintain buildings, sheds, pens, equipment and facilities to maintain health standards and high-quality of produce
- monitor animal health and seek veterinary advice when necessary
- ensure there is adequate food supply, water and protection from the weather for livestock
- ensure temperature, ventilation and lighting conditions are comfortable for livestock kept indoors
- observe and record produce quality or livestock body weight and condition, adjusting management or feeding programs if required
- manage the strategic direction of the business
- manage the financial aspects of the business by controlling income and expenses
- plan activities to minimise environmental degradation, monitor environmental effects of farming activities and repair existing damage through programs such as tree planting.

Farmers may work on large or small enterprises, or they may need to travel between a number of properties to manage activities. They spend much of their time working outdoors.

Specialisations

- Permaculturalist
- Production Horticulturist

Personal Requirements

- Good at planning
- Able to analyse and solve problems
- Good organisational and supervisory skills
- Good communication skills
- Responsible approach and attitude
- Enjoy working outdoors in all kinds of weather
- Able to work both in a team and with limited social contact
- Able to handle animals with confidence and patience
- Mechanical aptitude
- Aptitude for working with computers
- Able to work independently

Education and Training

You can work as a farmer or farm manager without formal qualifications, although skills in farm management, crop management and/or animal husbandry are considered essential. You may learn these skills from an experienced farmer or farm manager on a working farm or formally at an educational institution such as a TAFE, university or an agricultural college. Courses may focus on specific areas of agriculture or all aspects of farm management.

You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a farmer or farm manager through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Alternatively, you can become a farmer or farm manager by completing a degree in agriculture, agribusiness, animal science, agricultural science or rural science. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, physics and chemistry are normally required. Applicants may also be required to attend an interview and have basic farm skills. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Traditionally, farms in Australia have been owner operated and farmers have been self-employed. Such properties have often been owned by the one family over many decades.

As product markets have changed and new technologies have been introduced, many properties have merged into bigger farms, often run by employed farm managers. For all farmers and farm managers, the business of running a farm has become more complex and sophisticated.

Related Jobs

Agricultural Scientist (p 28); Aquaculture Technician (p 29); Beekeeper (p 29); Horticultural Tradesperson (p 300); Landcare Worker (p 36).

Fisheries Officer

Also known as Fishing Inspector and Marine Officer

Fisheries officers are responsible for the management, conservation and preservation of state and territory fisheries resources. They work to ensure these resources are not endangered or exploited.

Fisheries officers:

- patrol and investigate waterways for unlawful fishing activities and the removal of protected marine life
- ensure relevant laws and regulations are obeyed
- inspect fishing vessels, fishing gear and processing establishments to ensure compliance
- survey oyster, pearling, fishing and prawning leases to ensure regulations are observed
- advise industry personnel on fishing regulations, export standards and the renewal of fishing licences

- check that fish are sold through legal markets and that fish markets do not sell undersized fish
- investigate alleged breaches of legislation
- prepare reports and provide evidence in court when required
- assist in the supervision of shark nets
- identify, survey and monitor areas and activities that affect fish and their habitats
- promote marine management programs and policies
- educate, advise and provide information to recreational fishers, as well as industry about a wide range of topics relating to fish and their protection
- assist other agencies by responding to emergency situations such as oil spills, the beaching of whales, and shark-related incidents
- provide assistance in research programs
- keep vessels and equipment in good order
- produce statistical reports and undertake other clerical duties.

The duties of fisheries officers vary greatly across the states and territories. The type of work they do often depends on the size and type of commercial and recreational fishing, and related industries in their region. Fisheries officers may also serve as fisheries observers on naval patrol boats, or they may be responsible for wildlife protection.

Fisheries officers are required to wear uniforms. They work irregular hours, including weekends, public holidays and nights. They are often required to move around the state or territory and may be absent from their headquarters for long periods. They work in all weather conditions and may have to sleep in vehicles, tents or boats.

Specialisations

- Boating and Fisheries Patrol Officer
- Fisheries Observer

Personal Requirements

- Able to cope with the physical demands of the job
- Normal colour vision
- Good oral and written communication skills
- Good negotiation and conflict-resolution skills
- Ability to swim
- Enjoy outdoor work

Education and Training

To become a fisheries officer in Queensland, SA and Victoria, you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a fisheries officer through a traineeship. Entry requirements may vary, but employers generally require Year 10.

In NSW and WA, you usually need to complete training with the relevant government department. In Tasmania, you can work as a marine and rescue officer with Tasmania Police or as an inland fisheries enforcement officer with the Inland Fisheries Service. To work as a marine and rescue officer, applicants must first become qualified police officers.

Fisheries officer does not exist as a separate occupation in the NT. This role is performed by sworn officers of the NT Police.

Entry to this occupation may be improved if you have a degree in fisheries and aquaculture, criminal justice, criminology, environmental science, environmental management or a related area. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Depending on your state, you may be required to hold a drivers licence and boating licence. You may also need to be an Australian citizen or have permanent residency, undergo a National Police Check, hold a Provide First Aid Certificate, undergo a medical assessment or obtain a Coxswains Certificate.

Applicants may be required to pass a swimming test or hold a swimming certificate or licence. see the separate entry for Lifeguard for more information.

Employment Opportunities

Fisheries officers are employed by state government departments or the police force, depending on the state or territory. Entry to this occupation is very competitive. With experience, and further training, fisheries officers may move into professional science positions or into general management. Employment opportunities are determined by government policy and funding.

The Australian Fisheries Management Authority (AFMA) is the government agency responsible for the efficient management and sustainable use of Commonwealth fish resources on behalf of the Australian community. Officers performing duties on behalf of the AFMA may be required to perform duties anywhere in Australia.

Related Jobs

Aquaculture Technician (p 29); Deckhand (p 261); Forester (p 34); Marine Biologist (p 241); Police Officer - State (p 161); Primary Products Inspector (p 312).

Forester

Foresters study, establish, manage and harvest forests to ensure there is a continuing supply of timber and associated forest products. They also maintain forests to meet community recreational needs. They may be involved with forest ecology (environment), hydrology (water), entomology (insects), pathology (diseases) or geographic information systems. Other areas of specialisation include various commercial forestry aspects and forestry extension and consultation services.

Foresters:

- manage forest resources by protecting and regenerating forests and promoting effective growth
- establish plantations of native and introduced timber species
- plan and implement fire prevention, detection and suppression systems
- observe the effects of environmental factors on the growth and health of plants
- measure and record tree volume and growth, as well as changes in the forest's timber and other resources
- estimate the sustainable supply of timber and associated forest products
- plan and implement the growing and harvesting of native and introduced plantation forests
- protect wildlife habitats and forest streams
- develop recreational facilities and control their use
- undertake landscape management, which may involve manual and satellite mapping, aerial photo interpretation and field measurements

- advise governments, industry and landholders on forestry, and plan and conduct educational programs on the care and value of trees and forests
- conduct research on various aspects of forestry
- supervise and train technical, clerical and field staff and coordinate their work.

Foresters work both indoors and outdoors, often in isolated bush areas.

Personal Requirements

- Aptitude for science
- Able to take initiative
- Interested in environmental issues
- Good communication skills
- Enjoy outdoor activities

Education and Training

To become a forester you usually have to complete a degree in forest sciences or forest science and management. Alternatively, you can complete a bachelor degree in a relevant area such as environments or environmental science, followed by a postgraduate qualification in forestry or forest science.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry, physics, biology and earth and environmental science are normally required. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Most degrees in forestry are recognised by the Institute of Foresters of Australia (IFA). The institute offers student, associate and voting membership. Contact IFA for further information.

Universities recommend that students seek employment in the forestry industry during summer vacations. Field or practical experience is highly regarded when seeking full-time employment.

Employment Opportunities

Foresters are employed by state and territory government agencies concerned with public land, state forests, soil conservation, national parks and wildlife. They are also employed by local government agencies and regional authorities in areas such as fire protection and urban forestry. There are opportunities with pulp and paper companies and other large firms in forestry related industries. Foresters may work as field management officers, scientific officers, resource planners, fire prevention officers, conservation officers, timber and harvesting managers, reafforestation (replanting) officers and production managers.

Forestry graduates usually enter the occupation as project foresters and gain experience by rotating through positions during the early years of employment. Employment in research and advisory positions, such as with the Commonwealth Scientific and Industrial Research Organisation (CSIRO), requires a higher degree in plant and/or soil sciences.

Employment opportunities depend on government strategies for the conservation and development of forest resources, the number and size of native forests and plantations, and demand for timber products.

Related Jobs

Agricultural Scientist (p 28); Agricultural Technical Officer (p 28); Biotechnologist (p 234); Fisheries Officer (p 33); Geographic Information Systems Officer (p 83); Natural Resource Manager (p 37); Primary Products Inspector (p 312); Zoologist (p 338).

Horticultural Assistant

Horticultural assistants undertake a range of tasks involving the cultivation, growing, harvesting and maintenance of trees, plants and gardens.

Horticultural assistants:

- prepare new garden sites, plots and soils using hand tools or machines
- load, unload and move gardening supplies and equipment
- assist with planting and transplanting seeds, bulbs, flowers, shrubs, trees and lawns
- clean gardens and remove rubbish
- maintain plants and gardens by watering, weeding, fertilising and mowing lawns
- adjust mist irrigation systems, shade and ventilation in a nursery, garden or greenhouse
- prepare and package plants for sale or transport
- erect barriers, fences or structures in gardens.

Horticultural assistants usually work under the supervision of a horticultural tradesperson. They work outside and in greenhouses, often in a team. Some of the work is physically demanding as it involves bending, lifting and the use of machinery such as tractors, rollers and edging machines. Protective clothing must be used when handling fertilisers and pesticides, and to prevent injury while using machinery.

Personal Requirements

- Able to undertake manual and sometimes heavy work
- Observant and methodical
- Good communication skills
- Enjoy outdoor work
- Able to cope with the physical demands of the job
- Enjoy working in teams

Education and Training

You can work as a horticultural assistant without formal qualifications. You will probably get some informal training on the job.

You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a horticultural assistant through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Horticultural assistants are mainly employed by retail and wholesale nurseries, plantation timber companies, local governments, parks authorities and private gardening and landscaping companies to assist professionals.

There is strong demand for entry-level positions into this occupation. With experience and further training, it is possible to gain promotion to horticultural tradesperson positions.

Related Jobs

Horticultural Tradesperson (p 300).

Hydrologist

$1,500 High skill Strong

Hydrologists measure, analyse and maintain the quantity and quality of water in rivers, lakes, stormwater and sewage. They use this information to plan and develop strategies for water conservation and the improvement of water quality.

Hydrologists:

- select, install, maintain and repair instruments that monitor such things as water levels, water flows, ground water, rainfall and sediments
- complete field observations and collect sample data at various locations to confirm data gathered by automatic monitors
- prepare data for use by other professionals
- provide advice to other professionals about civil works associated with water-related projects and activities (including dams, weirs, bridges, irrigation projects, water supply schemes, flood protection works, warning services and marine facilities)
- prepare reports on sites, data collection and quality.

Hydrologists work in offices and in the field.

Personal Requirements

- Able to work accurately and systematically
- Able to communicate effectively
- Aptitude for physics, mathematics and statistics
- Mechanical ability and the ability to work with technology
- Able to work independently or as part of a team
- Able to work in confined spaces and at heights
- Able to swim

Education and Training

To become a hydrologist you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you have a degree with a major in environmental science, hydrology, water science or natural resources. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, earth and environmental science, biology, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

The major employers of hydrologists include government departments, statutory authorities, the mining industry and consulting firms in hydrology, environmental science or environmental engineering. Competition for entry-level positions is very strong. The number of available assistant or trainee positions varies each year.

Related Jobs

Surveyor (p 46).

Landcare Worker

$1,086 Entry level Moderate

Also known as Conservation Worker

Landcare workers perform a range of tasks to maintain and restore native bushland and farmland.

Landcare workers:

- kill and remove weeds and unwanted vegetation using minimal disturbance techniques or herbicides
- collect seeds from local and native plants
- propagate local and native plants
- replant native trees, shrubs, grasses and wildflowers
- take part in pest eradication programs
- collect botanical and environmental data
- map vegetation
- construct and maintain tracks and facilities in bushland
- maintain equipment
- apply control measures to combat salinity.

Landcare workers frequently use herbicides and equipment to prune trees and remove debris.

Much of the work is fairly strenuous and involves a lot of bending and working at ground level. This is an outdoor job and workers are exposed to the elements.

Specialisations

- Environmental Field Officer

Personal Requirements

- Interested in the preservation of natural bushland
- Good attention to detail
- Able to cope with the physical demands of the job
- Able to work as part of a team

Education and Training

You can work as a landcare worker without formal qualifications. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a landcare worker through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Landcare workers are employed by state, territory and local governments, as well as private organisations and mining companies.

Job opportunities are expanding with greater awareness of environmental issues. With experience, and sometimes further training, landcare workers may progress to more senior or specialised roles, such as technical officer, project officer and project manager.

Related Jobs

Agricultural Technical Officer (p 28); Horticultural Tradesperson (p 300); Park Ranger (p 158).

Natural Resource Manager

$2,259 Very high skill Strong

Natural resource managers develop conservation plans for nature reserves, land and other natural resources, so that people can use these resources in an ecologically sustainable way. Natural resource managers specialising in land and biological resources work in agencies where they can apply ecological and planning principles to the management of renewable resources such as forests, grasslands and agricultural landscapes. Natural resource managers specialising in water and soil resources may apply their skills to several areas, including irrigated agriculture, drainage, water supply, water catchment management, pollution control and rehabilitation after mining activities.

Natural resource managers:

- assess techniques for flora and fauna conservation
- monitor components of the environment, such as soil, water and air
- develop practical solutions for environmental management and rehabilitation
- develop techniques to ensure the development and use of vital land and water resources is ecologically sustainable
- undertake plant and animal pest management
- undertake bush regeneration activities
- work with land managers to improve biodiversity on private lands
- organise geological, plant and animal research
- undertake laboratory work
- develop resource management policy
- work with government and environmental groups
- run community education programs.

Personal Requirements

- Interested in conservation and management of the environment
- Aptitude for science
- Good oral and written communication skills
- Able to work indoors and outdoors
- Patient and able to persevere
- Good project management skills

Education and Training

To become a natural resource manager you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you have a degree in environmental management, environmental science, sustainability or wildlife and conservation biology. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, physics, chemistry, earth and environmental science, biology and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Natural resource managers are employed in the areas of catchment management, land care, recreation, research, soil conservation and wildlife management. They work in universities, the minerals industry, environmental organisations and government agencies that manage community-owned land (such as conservation parks, forest or local government reserves and Crown land).

With greater community concern about environmental issues and increased demand for government accountability, resource management is a growing field. However, competition for entry level positions is very high. Gaining practical experience in conservation and land management is recommended.

Related Jobs

Environmental Scientist (p 31); Forester (p 34); Geographic Information Systems Officer (p 83); Geologist (p 239); Landcare Worker (p 36); Park Ranger (p 158); Primary Products Inspector (p 312).

Shearer

Medium skill Strong

Shearers harvest wool from sheep using power-driven handpieces that are fitted with combs and cutters.

Shearers:

- take sheep from catching pens and hold firmly while shearing fleece in one piece
- select shearing combs to suit the type of sheep and wool
- ensure the wool is harvested with the least possible stress on the sheep and in accordance with strict animal welfare guidelines
- return shorn sheep to let-out pens for counting and checking
- shear stud animals with hand shears or special combs
- clean and sharpen combs and cutters
- identify sheep with specific characteristics, such as black spots, as requested by the wool classer.

Expedition shearers work in a team and may be responsible to an overseer or shearing contractor. These shearers travel long distances from property to property to work. Others may work within their own district and travel daily to the shearing shed, returning to their own homes each day. Accommodation is usually provided in shearers' quarters either on the property or in a nearby town. Shearers supply their own work clothes, combs and cutters.

Personal Requirements

- Able to work as part of a team
- Able to work quickly and consistently with hands for long periods
- Good hand-eye coordination
- Willing to live in remote areas
- Able to handle sheep with confidence
- Able to cope with the physical demands of the job

Education and Training

You can work as a shearer without formal qualifications. You will probably get some informal training on the job. However, entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a shearer through a traineeshipg. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Shearers can be self-employed or work in shearing teams on properties usually located in country areas. They are paid

according to the number of sheep they shear and crutch. Shearers can develop their skills to improve earnings and may progress to shed management, wool classing or other areas of the wool industry.

Employment is not as seasonal as it once was. Work is usually available throughout the year in most states, with peak demand being in spring and autumn.

Related Jobs

Animal Technician (p 232); Farmer (p 33); Primary Products Inspector (p 312).

Stablehand

Stablehands assist with maintaining and cleaning stables and handling horses.

Stablehands:

- brush and groom, feed, handle and exercise horses, and lead them to their stables
- check horses for lameness, common injuries, ailments and infections
- give first aid, medication or other treatment to horses
- clean and maintain stables and training equipment
- accompany horses to registered race meetings, gymkhanas (horseriding events) and equestrian events
- exercise horses during track work or equestrian activities.

Stablehands start work early in the morning and may be required to work on weekends and public holidays. The work must be done in all kinds of weather. Long hours are usually involved.

Personal Requirements

- Good health
- Capable of hard physical work
- Genuine interest in horses and their care

Education and Training

To become a stablehand you usually have to complete a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Stablehands are employed in breeding, racing, trotting or riding stables, agistment (feeding) centres or farms. Some live-in jobs are available in both city and country areas. This occupation has a high turnover of staff, which results in a steady replacement demand. To become a stablehand you do not need to be able to ride horses. With experience, and sometimes further training, a stablehand may progress to stable supervisor or manager. Some stablehands who show potential and are light in weight may become apprentice jockeys. There are also opportunities for self-employment as a horse trainer/breeder.

Related Jobs

Animal Attendant (p 335); Animal Technician (p 232); Horse Trainer (p 336); Jockey (p 266); Track Rider (p 272).

Sustainability Officer

Sustainability officers work to create enduring communities that have a positive environmental, economical and social impact.

Sustainability officers:

- prepare grants and partnership proposals
- assess a city or business's programmes to determine their environmental impact, and make recommendations to avoid or lessen impacts
- investigate, recommend and implement renewable energy, water conservation, waste and recycling and other environmental management programmes
- provide information to the public about environmentally sustainable methods and projects
- represent organisations in public forums
- strategically advocate for sustainable approaches to projects
- develop sustainability programmes.

Sustainability officers may work indoors, or visit sites relevant to an environmental management programme.

Personal Requirements

- Strong organisational and project management skills
- Able to work well in a team
- Able to think strategically
- Interested in the environment and communities
- Good communication skills

Education and Training

You can become a sustainability officer by studying sustainability, environmental science or environmental science and management at university. Alternatively, you can complete a degree in a relevant field, followed by a postgraduate qualification in sustainability or environmental management. To get into the degree courses you usually need to gain a Year 12 qualification. Prerequisite subjects, or assumed knowledge, in English and mathematics is normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the universities you are interested in for more information.

Employment Opportunities

Opportunities exist within state and federal government departments, city councils and private organisations.

Sustainability Specialist

A sustainability specialist is responsible for coordinating sustainability projects and initiatives. They are employed to help companies and organisations balance environmental responsibility and business efficiency.

A sustainability specialist:

- generate and oversee sustainability projects
- propose sustainability initiatives based on cost and feasibility
- interact with sustainability professionals to coordinate project objectives and strategies
- deliver administrative support for sustainability issues
- work with corporations to reduce their carbon output
- organise environmental volunteer activities
- improve a company's production line to use recyclable materials for packaging
- reduce a business' water and electricity consumption.

Sustainability specialists generally work in office buildings, laboratories, or industrial plants. They might spend time outdoors monitoring or directing operations, or solving problems on-site.

Personal Requirements

- Strong written comprehension
- Able to work effectively within a team
- Passion for the environment
- Good organisational skills

Education and Training

To become a sustainability specialist, you usually need a degree in environmental science. These subjects place heavy emphasis on statistical and analytical skills. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

A sustainability specialist could work in either the private sector or the public sector, providing reports and analysis. Their work can inform policy changes and business decisions, as well as educate people. In the private sector, they can be employed by a wide range of industries, providing reports and solutions that can influence a business' activities and profitability. In government, a sustainability specialist may work on reports to guide regulation decisions and infrastructure projects.

Related Jobs

Climate Change Analyst (p 30); Economist (p 56).

Viticulturist

$1,788 | Very high skill | Stable

Also known as Vineyard Manager

Viticulturists plan, supervise and coordinate the growing of selected grape varieties for the production of wine, dried fruit or table grapes.

Viticulturists:

- manage the operations of the vineyard, including soil management, irrigation, and disease and weed control
- direct and oversee general growing activities such as harvesting and pruning
- liaise with grape buyers and winemakers
- monitor grape maturity to ensure their quality and calculate the correct time for harvest
- recruit, supervise, manage and train winery workers involved in the production and harvesting of grapes
- give guided tours, conduct tastings and advise visitors about various aspects of wine and grapes
- keep records of techniques used and harvest outcomes for each season.

Viticulturists spend a lot of time outdoors in vineyards, but also work indoors in laboratories, offices and grape processing facilities. Knowledge of science and business management is increasingly important in viticulture.

Personal Requirements

- Interested in horticulture or agriculture
- Good analytical and problem-solving skills
- Able to make accurate observations
- Good communication and interpersonal skills
- Good organisational skills
- Flexibility and adaptability
- Enjoy outdoor work
- Willingness to live and work in regional areas
- Able to manage plant allergies and hay fever

Education and Training

To become a viticulturist you usually have to study viticulture and oenology at university. Alternatively, you can become a viticulturist by completing a degree in science, applied science or agricultural science at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics and chemistry are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

The Australian Society of Viticulture and Oenology provides technical information to members who work in the grape and wine industry.

Related Jobs

Agricultural Scientist (p 28); Botanist (p 234); Farmer (p 33); Horticultural Tradesperson (p 300).

Winemaker

$1,979 | Very high skill | Moderate

Also known as Oenologist

Winemakers plan, supervise and coordinate the production of wine or spirits from selected varieties of grapes. Scientific knowledge is playing an increasingly important role in winemaking and some winemakers specialise in the research and development of wine.

Winemakers:

- liaise with viticulturists who manage planting programs and the cultivation and production of grapes
- conduct various laboratory tests to monitor the progress of grapes to ensure their quality and to determine the correct time for harvest
- organise the crushing and pressing of grapes, the settling of juice and the fermentation of grape material
- direct the filtering of wine to remove remaining solids
- conduct laboratory tests and monitor quality of wine
- place filtered wine in casks or tanks for storage and maturation
- prepare plans for bottling wine once it has matured and make sure that quality is maintained when the wine is bottled
- supervise cellar personnel involved in the production of wine
- supervise the maintenance of the vineyard and winery during the off-season

- liaise with sales and marketing staff to make sure that the type, style and quality of wines produced will meet market demands
- organise and supervise local and export wine sales
- conduct technical in-service training for cellar staff
- give guided tours, conduct tastings and advise visitors about various aspects of wine.

Winemakers working in large wineries are in charge of the technical side of the business. Those working in small wineries may be responsible for the whole winemaking process, from the growing of the grapes to the bottling and marketing of the finished wine.

Personal Requirements

- Excellent sense of smell and taste
- Able to analyse and solve problems
- Able to make accurate observations
- Good communication and interpersonal skills

Education and Training

To become a winemaker you usually have to complete a degree in viticulture and oenology, wine science, wine chemistry or wine evaluation. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics and chemistry are normally required. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

The majority of positions for winemakers are in NSW, SA and Victoria, although there are also employment opportunities in WA. Smaller wine industries are present in Queensland and Tasmania. You can gain experience by obtaining temporary or seasonal positions in a variety of winemaking regions and countries. Winemakers with considerable experience can work as consultants to different wineries, although the majority of wineries prefer to have their own winemaker. Wineries vary in size from small operations (perhaps family-owned) to large companies employing many people. Winemakers may be involved in all aspects of winemaking. They may also specialise in a particular area, depending on the size and type of winery.

Related Jobs

Agricultural Scientist (p 28); Botanist (p 234); Environmental Scientist (p 31); Food Technologist (p 237); Viticulturist (p 39).

Architecture & building

Architecture blends art, culture, science, technology and elements of business. Architects work with building contractors, engineers, tradespeople and just about anyone involved in delivering a building project. As well as taking care of the design process, they play an important advisery role for their clients.

Courses and specialisations

Architecture

Bachelor-level degrees — typically not accredited as standalone qualifications for becoming a registered architect — often serve as the initial step towards attaining an accredited qualification, namely the masters degree.

Through a three-year bachelor's degree program such as the Bachelor of Design (Architecture), you will be able to progress to a masters degree.

Once you have completed your masters degree, you will be required to gain a minimum of two years' professional experience before sitting for the Architects Registration Board examination and registering as an architect in Australia.

You can expect to spend plenty of time in the design studio and on practical assignments.

Most architecture courses require at least some competence in mathematics.

Built environment

Built environment refers to everything that is man-made — this includes buildings, as well as the objects inside them, communities and cities. Courses are divided roughly into design, construction, planning and property.

Where to study

There are several things to consider when you're shopping around for an architecture and building course. The first is whether you can get in, as this is a competitive field. Prerequisites often include English, mathematics and, for design-based courses, art and design. Other subjects may be required or recommended depending on the niche you choose.

Five-star universities

Educational experience

UNE	87.1%
CQUni	81.3%
UWA	79.1%
CANBERRA	78.9%
TORRENS	78.3%
WESTERN SYDNEY	78.3%

National average
71.9%

Graduate employment

UNE	89.1%
CQUni	88.6%
MACQUARIE	83.3%
DEAKIN	82.3%
QUT	81.8%

National average
70.5%

Learner engagement

GRIFFITH	73.9%
MONASH	67.0%
UTS	66.6%
QUT	65.1%
ADELAIDE	64.2%

National average
57.7%

Learning resources

BOND	87.7%
MACQUARIE	87.2%
GRIFFITH	84.7%
DEAKIN	82.6%
QUT	81.2%

National average
77%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

7,158
Undergraduate

10,638
Postgraduate

4,583
International undergraduate

What can I do?

- Surveying
- Structural engineering
- Production design
- Interior design
- Town planning
- Architecture

Graduate starting salary

$48,200
Undergraduate

57,500
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

70.5%
Undergraduate

81.4%
Postgraduate

Five-star universities

Median starting salary

CQUni	$78,200
UniSQ	$72,000
NEWCASTLE	$68,800
VU	$66,300
LA TROBE	$65,800

National average
$48,200

Skills development

MACQUARIE	84.9%
RMIT	82.4%
TORRENS	81.4%
SYDNEY	81.3%
UniSA	80.3%
BOND	80.0%
GRIFFITH	79.9%

National average
78.2%

Student support

BOND	79.3%
UWA	78.4%
TORRENS	77.6%
WESTERN SYDNEY	77.1%
DEAKIN	76.6%
UniSA	76.6%

National average
69.2%

Teaching quality

MACQUARIE	90.7%
UNE	86.8%
UWA	83.5%
RMIT	82.6%
CQUni	82.5%

National average
78%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Architect

Architects use creativity and a practical understanding of structures and materials to develop concepts, plans, specifications and detailed drawings for buildings and other structures. They negotiate with builders and planning authorities, administer building contracts and inspect work that has been carried out.

Architects:

- meet with clients or builders to discuss their requirements and prepare a design brief
- prepare sketches, production drawings and detailed drawings by hand or using computer-aided design (CAD) software
- combine structural, mechanical and artistic elements into a building's design, such as decks and atriums, lifts, air conditioning systems and decorative finishes
- discuss designs and cost estimates with clients and others involved in the project
- obtain necessary approvals from authorities
- prepare specifications and contract documents for builders, tradespeople and legal advisers
- evaluate projects once they are completed and occupied.

Architects may also be involved in project feasibility studies, strategic asset investigations, heritage studies, urban planning, interior design or landscape design.

Architects often specialise in particular types of work, such as domestic, low-rise commercial, high-rise commercial, industrial, conservation and heritage buildings. Architects need to keep up with changing trends in the construction industry and the community. They have considerable contact with the public.

Personal Requirements

- Aptitude for design
- Creativity
- Able to analyse problems logically
- Good communication skills

Education and Training

To become an architect you usually have to complete an accredited degree in architecture. This usually consists of a degree in arts or design with a major in architecture, followed by a Master of Architecture.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Applicants may also be required to demonstrate basic freehand drawing ability and computer skills. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Architects must also be registered with the Architects Registration Board in the state or territory in which they intend to practise. To apply for registration you must complete an accredited architecture degree, have two years of monitored experience with an architectural firm and sit an examination in architectural practice set by the Architects Accreditation Council of Australia (AACA).

Employment Opportunities

Most architects work in architectural firms or for businesses that have large construction programs. Many start their own practice after a few years of experience.

Architectural training develops the ability to combine arts, science and technology. This means that architects increasingly find work in areas outside of architecture, such as urban planning and design, property development, construction management, interior design, industrial design, teaching, research and journalism.

Related Jobs

Civil Engineer (p 138); Cultural Heritage Officer (p 187); Industrial Designer (p 104); Interior Designer (p 105); Landscape Architect (p 45).

Architectural Draftsperson

Also known as Architectural Technologist and Draftsperson

Architectural draftspeople complete architects' and other designers' concepts by preparing documents (drawings or plans) and liaising with builders and contractors.

Architectural draftspeople:

- prepare architectural drawings for development and construction applications
- analyse architects' and building designers' concepts, and prepare preliminary sketches and detailed drawings
- produce designs, detailed drawings and documentation
- prepare drawings showing site layouts, proposed site layouts, site analysis, floor plans, elevations, sections, three-dimensional images, materials and finishes
- select quality of materials needed
- prepare building specifications for building documentation to suit individual clients and tendering purposes
- represent or assist architects or building designers on building sites to ensure plans and specifications are followed
- liaise with relevant public sector organisations and specialist consultants (such as engineers, town planners and building surveyors)
- examine relevant Acts, regulations, codes, standards and bylaws in the course of undertaking project documentation.

Architectural draftspeople spend some time outdoors inspecting sites.

Personal Requirements

- Able to visualise ideas in three-dimensional form
- Enjoy technical drawing and working with technology
- Good concentration and attention to detail
- Some artistic talent in freehand drawing

Education and Training

To become an architectural draftsperson you usually have to complete a VET qualification in building design or residential drafting. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Additional Information

Graduates of certificate and diploma courses are eligible for membership of Building Designers Australia. Students are eligible for student membership. Visit their website for more information.

Building designers who act as sole traders in Queensland, Tasmania and Victoria, including architectural draftspeople, must be registered with the appropriate body in their state. Relevant qualifications and sufficient practical experience must be gained in order to be eligible for registration.

Employment Opportunities

Most architectural draftspeople are employed by licenced architects, building designers and planners in private practice or in various departments of state, territory and federal governments. Firms of consulting engineers, building companies and manufacturers of building materials and components also offer opportunities. Demand for architectural draftspeople is dependent on the level of activity in the building and construction industry and may vary over short periods. There are opportunities for self-employment as a contractor.

Related Jobs

Architect (p 43); Builder (p 278); Interior Designer (p 105); Model Maker (p 107); Quantity Surveyor (p 45).

Building Surveyor

$1,838 | High skill | Stable

Also known as Building Certifier and Building Inspector

Building surveyors advise on, interpret and enforce laws and regulations regarding building construction and safety.

Building surveyors:

- provide advice and assistance to builders and owners before finalisation and lodgement of building plans to avoid potential problems
- assess building plans submitted for approval to ensure they conform to building regulations and codes of practice
- make recommendations on matters such as the provision of amenities for the community
- issue building permits and compliance certificates
- carry out pre-purchase inspections of all types of buildings
- inspect buildings during construction to ensure proper methods and materials are used and that they conform to building regulations
- keep records and write reports on building progress in instances where regulations have been breached and plans have been altered
- give evidence in court cases involving breaches of building regulations
- assess the condition of existing buildings.

Personal Requirements

- Enjoy technical work
- Good communication skills
- Management and leadership skills

Education and Training

To become a building surveyor, you usually have to complete a VET qualification in building surveying. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information. Entry to this occupation may be improved if you have a degree in building surveying, construction management, civil engineering or architecture. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics and physics are normally required. Applicants may be required to submit a folio of work and/or attend an interview. Institutions have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

All those who work in the construction industry must undergo safety induction training and be issued with a Construction Induction Card (CIC). To work as a building surveyor, you will need to be registered with the relevant body in your state or territory. There are different levels of accreditation based on levels of qualification which determine the kind of work you can perform.

Employment Opportunities

Most employment opportunities arise in local government bodies (shire, town and city councils). There are some opportunities to apply the skills acquired in this occupation to other jobs in banks and building societies, as well as in building management companies. Building surveyors may become self-employed and subcontract to major building companies.

Related Jobs

Architect (p 43); Architectural Draftsperson (p 43); Builder (p 278); Civil Engineer (p 138); Quantity Surveyor (p 45).

Construction Manager

$3,450 | Very high skill | Strong

Construction managers are responsible for organising, overseeing and coordinating the construction of building projects and the resources involved in the process.

Construction Managers:

- Analyse and interpret architectural drawings
- Liaise with architects, engineers, tradespeople, property developers, building owners and subcontractors
- Arrange tenders, contract bids and building inspections
- Ensure work is conducted in line with building regulations and standards.

Construction managers spend their time in a variety of environments, ranging from offices to building sites. They may spend a significant amount of time travelling to different sites.

Personal Requirements

- Management and leadership skills
- Good planning and organisational skills
- Good communication and interpersonal skills
- Ability to problem solve
- Deadline-orientated

Study Construction Management

Available 100% online so you can work in the industry while completing your degree.

newcastle.edu.au/constructionmanagement

THE UNIVERSITY OF NEWCASTLE AUSTRALIA

CRICOS Provider 00109J

Education and Training

To become a construction manager, you usually have to complete a degree in construction management or project management at university. To get into these courses, you usually need to gain your Senior Secondary Certificate of Education. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

You can also become a construction manager by completing a VET qualification in building and construction. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

For further details, visit gooduniversitiesguide.com.au.

Landscape Architect

Landscape architects plan and design land areas for projects such as parks, schools, roads, sports complexes, holiday resorts, shopping centres, national parks and playgrounds. Landscape architects may specialise in projects such as parks, playgrounds, roads or public housing. They may also specialise in types of services, such as regional planning and resource management, site selection, cost studies or site construction.

Landscape architects:

- study and discuss designs, costs and construction of projects with clients
- talk to architects, engineers and other professionals, and gather information on factors such as historical and natural conservation requirements, soil structure, drainage, rock features, existing and proposed buildings, and sun and shade movements
- draw up site plans outlining site development, discuss plans with clients and seek approval
- prepare specifications, arrange cost estimates, list building materials required and detail working drawings of the site, showing features such as location of buildings, roads and walkways; land contours and drainage systems; soil conservation measures; and the vegetation to be planted, retained or removed
- investigate the heritage of sites and make plans for the management of open-space areas
- use computer and video simulation packages to develop broadscale landscape plans
- supervise site work
- advise on landscape problems concerned with environmental planning.

Landscape architects may work independently or with other professionals such as architects, engineers and town planners.

Personal Requirements

- Analytical and planning ability
- Aptitude for design
- Creative flair
- Good communication skills
- Enjoy the natural environment
- Able to work independently or as part of a team

Education and Training

To become a landscape architect you usually have to study a landscape architecture degree at a university accredited by the Australian Institute of Landscape Architects (AILA). Alternatively, you can study a related field, such as design, followed by a postgraduate qualification in landscape architecture.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Applicants may also be required to submit a portfolio of work and demonstrate freehand drawing ability and computer skills. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Most landscape architects are employed in small, private consultancies or by private businesses with architects and town planners. The remainder work in federal, state, territory and local government agencies. Many landscape architects establish their own practices.

Quantity Surveyor

Quantity surveyors prepare cost estimates and plans, audit projects, manage costs and administer contracts, for all levels and types of construction.

Quantity surveyors:

- liaise with architects, engineers, builders, contractors, suppliers and project owners
- study architectural and engineering drawings and specifications
- prepare a 'Bill of Quantities' that lists the individual components required to construct a project
- review any changes to a design plan to assess the effects on cost
- assess and recommend payment to contractors during construction
- prepare monthly cash-flow forecasts for clients and tax depreciation schedules
- perform feasibility studies to assist with decisions about the worth of a project proceeding
- serve as a consultant to business and government.

Quantity surveyors usually work in offices. They also visit building sites, clients and other members of construction teams.

Personal Requirements

- Analytical and logical
- Able to concentrate for long periods
- Good oral and written communication skills
- Able to work accurately with figures
- Able to work independently or as part of a team
- Aptitude for working with computers

Education and Training

To become a quantity surveyor you usually have to study quantity surveying or construction management at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Applicants may also be required to attend an interview. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Quantity surveyors work with architects, building contractors, developers, engineers and project managers. They can work as individual consultants or as part of a small or medium-sized firm. Some work as academics in universities. Some may find employment in government agencies. Those in the building industry usually work on larger-scale projects such as office complexes, high-density residential projects, hotels, factories and hospitals. Job prospects can fluctuate depending on the level of building activity. With experience, progress to managerial positions in the construction industry is possible.

Related Jobs

Architect (p 43); Architectural Draftsperson (p 43); Builder (p 278); Building Surveyor (p 44); Economist (p 56); Landscape Architect (p 45); Urban and Regional Planner (p 46).

Surveyor

Also known as Geomatic Engineer

Surveyors measure, analyse and report land-related information for the planning and regulation of land, sea and the environment. Surveyors may work in related fields such as photogrammetry, geographic information systems (GIS) or remote sensing, and as project managers. After spending some years in the field, they often progress to management roles.

Surveyors:

- measure the size and shape of an area of land using specialised tools and technology
- determine the position of boundaries of public or private land
- create property titles through plans for subdivision
- compile and evaluate data gathered from field studies
- interpret codes and laws to provide professional advice about legal matters relating to boundaries and titles
- study the natural and social environment, measure land and marine resources, and use the data in planning development of property, land and buildings in urban, rural and regional areas
- work with architects, engineers and developers to plan and monitor construction projects
- produce plans, maps, files, charts and reports.

Surveyors can spend a lot of time working outdoors. They also work in offices, analysing data and preparing plans and reports.

Personal Requirements

- Good at mathematics
- Interested in technology
- Good organisational skills and attention to detail
- Able to work neatly and accurately
- Good health and normal colour vision
- Able to work independently or as part of a team

Education and Training

To become a surveyor you usually have to complete a degree in surveying, spatial science, geospatial science or geographical information systems at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Graduates may be able to become registered or licensed by the surveyors board in their state or territory after completing a set amount of supervised practical experience. Graduates may also need to sit an exam, attend an interview, complete technical projects or pursue further study. All states and territories of Australia and New Zealand have mutual recognition arrangements, whereby registration as a surveyor in any one area allows for registration anywhere else in these zones through a process of application, involving payment of the appropriate fees and requiring that minimum statutory requirements are met.

Employment Opportunities

Surveyors are employed in engineering firms, mining and construction companies, government departments and private practices. Employment opportunities are dependent on activity in different sectors. Cadastral (land) surveyors generally have greater opportunities for employment. Registered surveyors may work for larger survey firms or may practise as partners in small firms. Large firms have greater scope for specialisation.

Nearly all mine surveyors are employed in the mining industry, with most being based in regional centres. With further study, it is possible to move into administrative or engineering positions, which may be based in capital cities. The introduction of new technology has reduced the time required for surveying fieldwork, including satellite-positioning systems, electronic-distance and angle-measuring equipment, land and geographic information systems, remote-sensing equipment and the use of computers and computer graphics.

Related Jobs

Geographic Information Systems Officer (p 83); Hydrologist (p 36).

Urban and Regional Planner

Also known as Town Planner

Urban and regional planners develop policies and plans for the use of land and resources. They advise on the economic, environmental, social and cultural needs of particular localities or regions as they relate to the built environment and the community. They also work on large-scale projects such as new suburbs, towns, industrial areas, commercial and retail developments, urban renewal projects and transportation links. Planning is a broadly based discipline and it is possible to specialise in a wide range of fields, including strategic planning, urban design, environmental impact assessment, residential planning, commercial and industrial planning, heritage planning, tourism planning and social planning.

Urban and regional planners:

- develop long-range objectives to cope with growth and change, in consultation with affected communities
- perform surveys and site inspections
- compile and analyse information on physical, economic, social, legal, political, cultural and environmental factors that affect land use
- discuss plans with local communities, private companies and government organisations
- consider new developments or re-developing areas and advise state and local governments about planning issues for projects such as new suburbs, transportation links, industrial estates, retail complexes and housing developments
- draw up plans for development or re-development and evaluate proposals in terms of benefits and costs, recommending how schemes can be carried out

- prepare urban and rural subdivision plans, taking into account various land uses, including residential, public open space, schools and shops
- prepare and coordinate economic, social and environmental impact studies
- provide evidence for appeals in planning disputes
- consult with, and act as an advocate for, community groups or developers
- assist developers to obtain planning permits
- design strategies to guide land and resource use and development in particular locations
- recommend a course of action that ensures local and regional needs will be met, by taking into account factors such as amenity, community facilities, access to employment, retail housing and transport
- supervise and work with associates and technicians.

Planners work closely with professionals in other fields (such as surveying, urban design, architecture, engineering, environment and conservation, property development, community services and transport planning). There is a high level of public contact as planners spend a lot of time in meetings and discussions. Time is also spent on field visits, writing reports and performing research. Planners are required to prepare documentation of decisions for independent review and are often called upon to appear as expert witnesses before appeal hearings.

Personal Requirements

- Interested in social, economic, environmental and cultural issues
- Good oral and written communication skills
- Able to produce detailed and accurate work
- Good analytical and problem-solving skills

Education and Training

To become an urban and regional planner you usually have to study urban, regional or environmental planning at university. You may also consider other degrees that emphasise related fields such as architecture, economics, environmental management or science, geography and sociology. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

The majority of urban and regional planners work in metropolitan areas and regional centres. However, the number of opportunities available in country areas is growing.

Related Jobs

Architect (p 43); Civil Engineer (p 138); Environmental Scientist (p 31); Geographic Information Systems Officer (p 83); Landscape Architect (p 45); Surveyor (p 46).

Business & management

Business and management is one of the biggest and most diverse fields of study. Most students think they'll end up working in a corporate office, but this is not always the case. You may find yourself working at a tech start-up, government agencies, non-profit organisations or manufacturing facilities.

Courses and specialisations

Some of the majors include actuarial studies, business information systems, entrepreneurship and innovation, human resource management, international business, marketing and supply chain and logistics.

Accounting

Accountants can work in any industry or sector. Studying accounting doesn't necessarily mean choosing a Bachelor of Accounting — you can do a degree in business, commerce or economics with an accounting major.

Economics

Economics is concerned with the way society distributes and uses resources such as land, labour, raw materials and goods and services. Specialisations include business economics, transport economics and econometrics. Some focus on statistical and analytical modelling that can be applied to economic problems, while others focus on global regions or industries.

Where to study

Your choice of institution depends on your needs and career aspirations. It's common to progress up the qualifications ladder, starting out with a VET qualification before entering a degree. Accounting specialisations are accredited by professional associations, so courses don't differ significantly between providers.

Five-star universities

Educational experience

SUNSHINE COAST	84.7%
BOND	84.0%
ECU	81.8%
DEAKIN	79.6%
UniSA	78.9%
UniSQ	78.6%
CQUni	78.3%
SWINBURNE	77.6%

National average
72.2%

Graduate employment

CSU	92.0%
UNE	91.9%
UniSQ	88.4%
SYDNEY	88.1%
CQUni	87.2%
UNSW	84.4%
ANU	83.7%
SOUTHERN CROSS	80.0%
SWINBURNE	79.9%
CANBERRA	79.9%

National average
76.9%

Learner engagement

BOND	80.4%
NOTRE DAME	65.1%
VU	63.5%
ECU	59.8%
UWA	58.0%
UNSW	56.6%
WESTERN SYDNEY	56.4%
MURDOCH	55.8%

National average
52.1%

Learning resources

BOND	92.8%
SUNSHINE COAST	89.5%
FLINDERS	88.1%
DEAKIN	87.7%
UniSA	86.5%
MURDOCH	85.6%
ECU	85.5%
UWA	84.4%

National average
80.1%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

13,476
Undergraduate

126,635
Postgraduate

14,052
International undergraduate

What can I do?

- Business analysis
- Management
- Marketing
- Sales
- Accounting
- Human resources

Graduate starting salary

$52,000
Undergraduate

$83,200
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

76.9%
Undergraduate

90.1%
Postgraduate

Five-star universities

Median starting salary

UNE	$60,100
SYDNEY	$59,700
CSU	$59,300
UNSW	$58,600
ANU	$58,200
CANBERRA	$57,800
FEDERATION	$56,100
MACQUARIE	$55,900

National average
$52,000

Skills development

BOND	86.2%
ECU	83.8%
TORRENS	82.6%
SUNSHINE COAST	81.1%
VU	80.6%
NOTRE DAME	80.4%
DEAKIN	80.3%
MURDOCH	80.3%
WESTERN SYDNEY	80.3%
SOUTHERN CROSS	80.2%
UniSA	80.2%
CANBERRA	80.1%
CSU	79.8%
SWINBURNE	79.6%

National average
77%

Student support

BOND	88.8%
UniSQ	81.0%
ECU	80.6%
SUNSHINE COAST	80.6%
MURDOCH	79.4%
SWINBURNE	78.9%
UniSA	78.7%
DEAKIN	78.1%

National average
72.2%

Teaching quality

BOND	87.8%
SUNSHINE COAST	87.7%
UniSA	81.9%
CQUni	81.8%
ECU	81.8%
DEAKIN	81.7%
TORRENS	80.7%
CSU	80.6%

National average
76.4%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Accountant

$1,660 | Very high skill | Moderate

Accountants analyse, report and give advice about the financial dealings of organisations and individuals, and advise on associated record-keeping and compliance requirements.

Accountants:

- assist with the formulation of budgetary and accounting policies
- prepare financial statements for presentation to boards of directors, management, shareholders and statutory bodies
- conduct financial investigations, undertake audits, prepare reports and advise on such matters as the purchase and sale of businesses, mergers, financing, suspected fraud, insolvency and taxation
- examine the income and expenditure of institutions
- provide assurance about the accuracy of information contained in financial reports and their compliance with statutory requirements
- provide financial and taxation advice about business structures, plans and operations
- liaise with bankers and brokers to establish funds management arrangements
- advise on the selection and application of computer-based accounting systems
- appraise cash flow and financial risk of investment projects.

Accountants may work on their own or with other accountants. Accountants in private practice have a high level of public contact, and some positions involve interstate or overseas travel.

Specialisations

- Auditor
- Budget Accountant
- Bursar
- Cost Accountant
- Finance Manager
- Forensic Accountant
- Investment Analyst
- Liquidator and Receiver
- Systems Accountant
- Taxation Consultant/Taxation Agent
- Treasurer

Personal Requirements

- Good communication skills
- Good presentation skills
- Able to build rapport with clients
- Able to analyse and solve problems
- Good organisational skills
- Discretion when dealing with confidential information
- Professional and ethical
- Able to work as part of a team

Education and Training

To become an accountant you usually have to complete a VET qualification in accounting. Subjects and prerequisites can vary between institutions, so contact your chosen institution for further information.

You can also become an accountant by completing a degree in accounting or a related field such as business or commerce with a major in accounting. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are generally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Graduates of approved courses may qualify for membership or entry to programs offered by Chartered Accountants Australia and New Zealand, CPA Australia or the Institute of Public Accountants. Eligibility for membership varies and may require work experience and/or further study. Check organisation websites for further information.

Employment Opportunities

Accountants work in diverse environments, including accounting firms, sporting organisations, retail outlets, government organisations, finance companies, banks and building societies, real estate firms, taxation consultancies and community service organisations. Accountants often work in partnership with other accountants or are self-employed.

Related Jobs

Actuary (p 50); Business Systems Analyst (p 54); Conveyancer (p 286).

Actuary

$2,060 | Very high skill | Moderate

Actuaries evaluate risk and opportunity applying mathematical, statistical, economic and financial analyses to a wide range of business problems.

Actuaries:

- analyse statistics relating to factors such as death, illness and accident, as well as current trends in the economy, to design new types of life insurance and superannuation policies
- determine appropriate premiums or contributions and rates of return by calculating the future probabilities of events such as unemployment, illness or changes in interest rates

- ensure insurance companies have sufficient financial reserves to meet claims
- advise companies on investment policy and the distribution of profits to policyholders
- undertake financial projections for, and measure and analyse the investment performance of, life insurance companies, financial institutions and government organisations
- provide advice to potential buyers or sellers of companies.

Personal Requirements

- Enjoy problem solving
- Good at mathematics
- Strong written and verbal communication skills
- Ability to think clearly and logically
- Focus and an eye for detail

Education and Training

To become an actuary you usually have to study actuarial studies or actuarial science at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

To become a fully qualified actuary, you must obtain a Fellowship of the Institute of Actuaries of Australia by satisfactorily completing its examinations and a recognised professionalism course.

Employment Opportunities

This is a small, highly skilled profession, providing expertise that is in steady demand throughout the world. Government, insurance, superannuation, wealth management, investments, health financing and banking are the more readily recognised fields in which actuaries work, but they also work in new, high-growth fields, such as data analytics, energy resources and the environment.

Many actuaries also hold executive positions in the operational management of financial institutions. Some actuaries work as consultants. Entry to this occupation is restricted by the standards required.

Related Jobs

Bank Officer (p 53); Financial Dealer and Broker (p 57); Insurance Agent (p 60).

Administrative Assistant

$1,073 | Lower skill | Moderate

Also known as Clerk

Administrative assistants perform a range of administrative tasks in an organisation.

Administrative assistants:

- sort and distribute incoming mail to areas and staff within the organisation and dispatch outgoing mail
- write business letters, reports or office memos
- answer telephone enquiries from customers, attend to visitors and assist other staff in the organisation with their enquiries
- operate a range of office machines such as photocopiers, computers and faxes
- file papers and documents
- undertake other duties such as banking, credit control or payroll functions.

Administrative assistants may be required to carry out numerous tasks in a small office, or to concentrate on just one or two specific tasks in a larger office.

Administrative assistants usually work indoors, and may work alone or in a team with other administrative assistants, professional and technical staff, and tradespeople. Experienced administrative assistants may undertake more complex tasks and responsibilities.

Personal Requirements

- Able to work methodically, accurately and neatly
- Good oral and written communication skills
- Able to work as part of a team
- Neat personal appearance

Education and Training

You can work as an administrative assistant without formal qualifications. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification in business, business administration or a related field. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become an administrative assistant through a traineeship in Business or Business Administration. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Administrative assistants are employed in most industry sectors, across government administration; business, education, health, legal and accounting services, and real estate.

The continual introduction of new technology requires administrative assistants to be flexible, multiskilled and capable of responding to change. It is possible to work remotely, using online technology to communicate with clients.

Related Jobs

Facilities Officer (p 294); Logistics Clerk (p 304); Public Servant - Australian Public Service (p 163); Transport Clerk (p 329).

Advertising Account Executive

$1,737 | Very high skill | Strong

Also known as Advertising Specialist

Advertising account executives devise and coordinate advertising campaigns to encourage consumers to purchase particular products or services.

Advertising account executives:

- discuss the products to be advertised with clients and other stakeholders
- brief other specialists in the agency and develop the details of a campaign
- present suggestions to clients along with a summary of the expenditure involved, and negotiate and arrange for modifications if required
- supervise and coordinate the work of the relevant production departments to ensure the campaign meets deadlines and budget requirements.

- keep in contact with clients throughout projects and deal with problems as they arise
- assist the client with marketing strategies.

Advertising account executives usually work as part of a team and closely with their clients. Their work is usually carried out under pressure to compete for clients' accounts and to meet their requirements within strict deadlines.

Specialisations

- Media Planner

Personal Requirements

- Creativity
- Imagination
- Good communication skills
- Organisational skills
- Able to work under pressure
- Analytical ability

Education and Training

To become an advertising account executive you usually have to complete a degree with a major in advertising or marketing and have relevant work experience. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Contact the institutions you are interested in for more information.

Additional Information

The Communications Council offers various short courses and certificates for people working in the industry, which may assist career progression. Refer to their website for more details.

Employment Opportunities

Advertising account executives usually work for advertising agencies that can vary in size and scope. Large agencies are often confined to metropolitan areas, as the advertising and promotions industry must have direct access to the major business districts, associated industry groups and media.

Career prospects are dependent on a reputation for effective advertising management. Employment is affected by the availability of advertising funds in corporate and other organisations, the perceived effect of advertising on consumers, the type of advertising considered appropriate, and the number of special events and new developments that require advertising and promotional campaigns.

Related Jobs

Graphic Designer (p 102); Public Relations Officer (p 75).

Anti-Money Laundering Specialist

Also known as Banking Compliance Officer and Fraud Analyst

Anti-Money Laundering Specialists monitor, investigate and report suspicious financial activity. They often use digital tools to better understand financial transactions and identify trends. They provide independent expertise, testing and recommendations for improvement and compliance.

Anti-Money Laundering Specialists:

- support compliance teams by interpreting regulations and meeting requirements driven by external and internal parties
- conduct risk assessment and investigation of anti-money laundering events to determine an appropriate course of action
- make recommendations to management and relevant business units based on the outcome of investigations
- provide recommendations to the management for new business rules to increase the effectiveness of policies and processes
- stay up to date with emerging global trends and issues in finance and anti-money laundering through effective research and analysis.

Many financial organisations hire Anti-Money Laundering Specialists as auditors and compliance agents.

Personal Requirements

- Strong analytical skills
- Ability to quickly identify risks and make decisions
- High attention to detail
- Good written communication skills
- Excellent teamwork skills

Education and Training

You will usually need a degree in finance or business management and experience working in the field before moving into the specialisation of anti-money laundering. A postgraduate qualification in anti-money laundering and counter-terrorist financing may also be required.

You may also wish to pursue a Certified Anti-Money Laundering Specialist (CAMS) accreditation by the Association of Certified Anti-Money Laundering Specialists. CAMS is globally recognised by governments and financial institutions.

Employment Opportunities

Anti-Money Laundering Specialists work in both the public and private sector.

Related Jobs

Accountant (p 50); Auditor (p undefined); Financial Dealer and Broker (p 57).

Auctioneer

Auctioneers conduct sales at which property or goods are sold to the person offering the highest purchase price.

Auctioneers:

- check the property or articles for auction
- organise the display of merchandise for inspection before the auction
- talk to vendors (sellers) to determine the lowest price at which the vendor is prepared to sell (the 'reserve price')
- read out the terms and conditions of sale at auctions and, if necessary, present relevant documents
- comment on any special features of the item being sold, call a starting price and ask for the first bid
- ask for bids and carefully adjust the amount by which bids are advanced until the item being sold goes 'under the hammer' to the highest bidder
- supervise the work of others as sales are finalised at the auction.

Auctioneers may be required to travel to inspect property or merchandise, or to visit prospective clients. They usually stand on a platform during auctions so they can be clearly heard and seen by all the people present.

They need to be thoroughly familiar with the property or goods they are offering for sale so they can recommend a realistic reserve price to vendors.

Sometimes they work outdoors (for example, when involved in an auction of livestock or real estate auctioned on site). They may also work irregular hours, including evenings and weekends.

Auctioneers may specialise in selling certain types of goods such as livestock, produce, real estate, vehicles, plant machinery and equipment, antiques and general household items. Some auctioneers may also specialise in online auctions.

Personal Requirements

- Strong, clear voice
- Able to make quick, sound decisions
- Self-confidence
- Able to address large groups of people

Education and Training

You can work as an auctioneer without formal qualifications. You will probably get some informal training on the job. Training and experience in real estate may be an advantage when seeking employment and training opportunities. State and territory real estate institutes offer short courses and professional development for real estate practitioners who wish to specialise in auctioneering. The Auctioneers and Valuers Association of Australia also offers courses in auctioneering and valuation practice. Contact the association for details.

Additional Information

To conduct a business or property auction you must be a licensed real estate agent or agent's representative. see the separate entry for Real Estate Salesperson for full details. Auctioneers of dangerous or sensitive goods, such as firearms or live animals, may require additional licences.

Employment Opportunities

Auctioneers are employed by auctioneering firms, valuers or real estate agents, stock agents and produce firms. Some work alone or in partnership as consultants. Many people gain experience as an auctioneer's clerk before becoming an auctioneer.

Employment opportunities for auctioneers may change during periods of economic growth, although work is still available during periods of low growth, particularly when firms and individuals become insolvent and have to sell their assets to pay off debts.

There is also a shift within the industry towards greater use of the internet and online auctions.

Related Jobs

Property Manager (p 62); Real Estate Salesperson (p 63); Stock and Station Agent (p 66); Valuer (p 66).

Bank Officer

Also known as Bank Customer Service Representative and Teller

Bank officers (including building society and credit union officers) receive and pay out money and assist customers with loans, foreign currency exchange and investments.

Bank officers:

- identify customer needs and refer customers to appropriate banking services and specialists
- accept money or cheques deposited by customers, verify records and receipts, and credit customers' accounts
- pay money to customers according to advice slips, cheques or negotiable documents, and debit customers' accounts
- assess the viability and credit risk of business and consumer loan proposals
- conduct foreign currency transactions for overseas travellers
- provide change and cash cheques
- record transactions
- balance cash and advise supervisors of cash position or discrepancies
- answer customer enquiries
- open and close accounts for customers.

Most bank employees work in a branch network where customers are mainly individuals and local businesses. Bank officers can request transfers to work in other branches and departments.

They may specialise in areas such as export financing, international banking, superannuation, personnel administration, law, economics, accountancy, corporate and commercial lending, public relations, advertising or information systems.

Specialisations

- Bank Teller/Customer Service Officer
- Credit Officer (Lending/Loans Officer)
- International/Overseas Officer
- Operations/Accounts Officer
- Telephone Consultant (Banking)

Personal Requirements

- Good communication and interpersonal skills
- Able to make calculations quickly and accurately
- Good organisation skills
- Willing to transfer to other branches if required

Education and Training

You can work as a bank officer without formal qualifications. You will probably get some informal training on-the-job.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification in banking services, financial services, banking services management, accounts administration, accounting or bookkeeping. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a bank officer through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Alternatively, you can become a bank officer by completing a business, commerce or economics degree with a major in banking or finance. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Officers who wish to be considered for promotion are encouraged to undertake further studies and may receive study assistance from their employers to do so.

Employment Opportunities

Bank, building society and credit union officers are employed in a variety of financial institutions, including merchant banks, finance companies, insurance companies and stockbroking firms.

The banking and financial industries are currently undergoing rapid change. Branch closures and the introduction of new technology and new ways of conducting banking business are affecting employment demand. The banking industry periodically reduces its workforce.

Competition is strong for entry-level vacancies. Contact individual financial institutions for recruitment information.

There are many different career paths available. Staff transfers are an important part of the banking industry and, throughout their careers, officers may be required to serve in a number of locations. Transfers within a metropolitan area can be required and may include working in administrative departments as well as branch offices. Transfers to regional locations are not usually required. However, accepting a transfer can assist career advancement and promotion opportunities.

Related Jobs

Actuary (p 50); Administrative Assistant (p 51); Bookkeeper (p 54); Economist (p 56); Financial Dealer and Broker (p 57); Insurance Officer (p 61); Mathematician (p 242).

Bookkeeper

Also known as Accounts Clerk

Bookkeepers record and put together summaries of the financial transactions of a business or other organisation for management purposes.

Bookkeepers:

- receive and record invoices and arrange payment
- prepare and send invoices to debtors
- check and process loan applications
- calculate and distribute wages and salaries
- prepare regular reports and summaries of accounting activities
- prepare financial statements and debtors' listings
- check customers' credit ratings
- verify recorded transactions and report irregularities to management
- prepare reconciliations of accounts.

In larger organisations, a bookkeeper's duties may be divided among a number of different positions.

Personal Requirements

- Aptitude for working with numbers
- Good organisational skills
- Able to work as part of a team
- Able to meet deadlines
- Good communication skills

Education and Training

To become a bookkeeper you usually have to complete a VET qualification in bookkeeping or accounts administration. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information. You can also become a bookkeeper through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Bookkeepers are employed in a wide range of industries, including finance, property, business services, manufacturing and government. Job opportunities depend on the state of the economy, the growth of new businesses and the level of computerisation of financial procedures. Many bookkeepers are self-employed, subcontracting to private companies. Part-time, temporary and contract employment is common. Competition for some positions may be strong.

Related Jobs

Accountant (p 50); Credit Officer (p undefined); Logistics Clerk (p 304); Stock and Station Agent (p 66); Transport Clerk (p 329).

Business Systems Analyst

Also known as Business Systems Planner

Business systems analysts study the overall business and information needs of an organisation in order to develop solutions to business and related technology problems. A business systems analyst's role is usually undertaken prior to the system design, building and programming stages of the systems development process.

Business systems analysts:

- work closely with clients to identify business needs and the costs and benefits of implementing a computing solution
- construct information technology (IT) definitions based on identified needs of the organisation
- work with other IT experts to address networking and hardware needs
- look at finance and budgetary matters
- devise and document a general system design based on the client's anticipated requirements
- negotiate options with the client.

A business systems analyst's role will vary with the size and complexity of the organisation. Some smaller organisations may combine various types of analyst, designer and programmer roles into one, while larger organisations may employ teams of specialists.

Personal Requirements

- Interested in computing and information and communications technology (ICT)
- Able to grasp concepts and think creatively
- Good interpersonal and communication skills
- Team leadership capabilities
- Able to make informed decisions on a wide range of complex business and technical issues
- Able to work independently

Education and Training

To become a business systems analyst you usually have to complete a degree in information technology, information systems or business information systems. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Membership of the Australian Computer Society is available to those who hold, or are working towards, suitable qualifications. There is a range of membership types available, allowing progression through the various levels as a member's career develops.

Employment Opportunities

With experience and sufficient start-up money, there are opportunities for self-employment, especially on a consultancy basis. Clients are often senior managers responsible for business or functional activities within organisations.

Related Jobs

Accountant (p 50); Computer Engineer (p 81); Computer Systems Auditor (p 82); Information Technology Administrator (p 84); Mathematician (p 242); Systems Designer (Information Technology) (p 88).

Customs Broker

Customs brokers, acting under licences issued by the Australian Border Force, provide professional assistance and advice about customs, quarantine and import and export matters. Customs brokers provide advice to clients about a range of international trade matters including customs clearance, quarantine and biosecurity restrictions, trade mark requirements, indirect tax obligations and other import and export matters.

Customs brokers:

- provide information to importers about customs tariffs, including rates of duty and the methods of goods clearance
- receive, prepare and process import documents
- make reservations with shipping or airline companies for freight to be exported and arrange for the clearance of cargo (export declaration)
- work with the Australian Border Force and other government authorities on the correct clearance of goods through customs and quarantine
- advise on tariff classifications, tariff concessions, appraisals and overseas trade enquiries.

Customs brokers in small agencies may handle all aspects of the work, while in large agencies they may specialise in a specific area such as imports, exports or classifying. Customs brokers have a lot of contact with the public.

Specialisations

- Freight Forwarder

Personal Requirements

- Good communication skills
- Good at mathematics
- Good memory
- High standard of personal integrity
- Aptitude for working with computers
- Good character, with no record of bankruptcy or criminal activity

Education and Training

To become a licensed customs broker you usually have to complete an accredited course in customs broking and be able to demonstrate adequate work experience in the customs broking industry. Entry to these courses usually requires Year 12. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

On completion of the course you will need to apply to the National Customs Brokers Licensing Advisory Committee (NCBLAC) for recommendation to the Australian Border Force for a customs brokers licence.

Additional Information

In order to obtain a customs broker's licence, applicants must meet integrity requirements outlined in the Customs Act.

Employment Opportunities

Customs brokers are employed by customs brokerages, freight forwarders, couriers and other companies involved in the import and export of goods in and out of Australia. With experience, some customs brokers become partners or start their own businesses. Others move into management jobs or freight transport. Customs brokers are usually based at major receiving ports. Demand for customs brokers can fluctuate with the level of overseas trade (imports and exports).

Related Jobs

Border Force Officer (p 153); Importer and Exporter (p 59); Insurance Officer (p 61); Logistics Clerk (p 304); Public Servant - Australian Public Service (p 163); Transport Administrator (p 328); Transport Clerk (p 329).

Debt Collector

Also known as Repossession Agent

Debt collectors assist in the retrieval of money owed by debtors from overdue accounts, unpaid loans or other debts. They may contact the debtor, advise them of debts and arrange for payments to be made.

Debt collectors:

- contact debtors and inform them of debts
- liaise with debtors, clients, process servers and solicitors
- provide information on debts
- prepare summonses and statements of claim for filing at court
- locate debtors and convey demand for payment
- put a settlement proposal or alternative payment arrangement to the debtor
- sight, inspect or recover a security interest.

Debt collectors often work in situations that can be stressful and must be able to maintain their professional conduct at all times. They may be required to work in the evenings or on weekends. The work may involve a lot of travelling to meet clients or debtors. The work of debt collectors is increasingly specialised. Some debt collectors work in offices or call centres while others are required to visit debtors at their home or workplace.

Personal Requirements

- Good negotiation skills
- Ability to remain calm in stressful situations
- Good research skills
- Patient and persistent
- Able to abide by strict regulations
- Good computer and internet skills

Education and Training

To become a debt collector you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information. You can also become a debt collector through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

The debt collection industry is jointly regulated by the Australian Securities and Investments Commission (ASIC) and the Australian Competition and Consumer Commission (ACCC) at national level, and by licensing authorities at state level. Depending on your state or territory, you may need to hold a licence, pass checks or meet requirements such as minimum age.

Employment Opportunities

Debt collectors may work for a variety of employers, including investigation agencies, insurance companies, private businesses and individuals. Those based in larger cities tend to specialise in a particular industry or in assisting litigation procedures.

Related Jobs

Court Officer (p 195); Financial Dealer and Broker (p 57); Private Investigator (p 197).

eCommerce Business Owner

Also known as Online Merchant

An eCommerce business owner operates an online retail business site that processes transactions by trading products or services.

eCommerce business owners:

- ensure product inventory is well-stocked and up-to-date
- conduct social media marketing by scheduling posts and tracking analytics
- process transactions
- review and respond to customer inquiries
- coordinate blog posts.

An eCommerce business owner usually works for themselves so they do not have set hours. They may operate from a commercial office or home office.

Personal Requirements

- Highly motivated
- Able to delegate tasks appropriately
- Strong leadership skills, including the ability to motivate others
- Resilience
- Desire to learn

Education and Training

You do not need any formal qualifications to be an eCommerce business owner. Entry to this occupation may improve if you have a degree in commerce, sales or business. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

An eCommerce business owner works for themselves, so gaining employment is based on being able to build or acquire a retail site that enables the purchase of goods and services. With sufficient capital, a graduate may be able to start their own online eCommerce business.

Related Jobs

Sales Representative (p 65).

Economist

Economists perform economic research and analysis, and develop and apply theories relating to the production and distribution of goods and services and people's spending behaviour. Economists advise and provide forecasts to governments and businesses on matters such as taxation levels, wages and prices, employment and unemployment, imports and exports, and interest and exchange rates. They investigate international or national economic situations, or particular features such as industries or regions.

Economists:

- help formulate government economic policies
- study the effects of government economic and monetary policies, expenditure, taxation and other budgetary controls on the economy and the community
- identify opportunities to improve efficiency and international competitiveness
- research, analyse and record the effects of government labour market programs on economic and industrial growth
- investigate the types of goods and services that are produced and consumed in Australia and in other countries
- study industrial relations issues such as wage fixation and the effect of industrial disputes on productivity
- prepare forecasts, analyse trends and advise on economic issues
- provide management personnel with economic information and advice.

Specialisations

- Applied Industry Economist
- Econometrician
- Environmental Economist
- Financial Economist
- Labour Market Economist
- Resource Economist
- Taxation Economist
- Transport Economist

Personal Requirements

- Able to think logically and analytically
- Able to discuss views clearly
- Able to write concisely
- Good at mathematics and statistical analysis

Education and Training

To become an economist you usually have to complete a degree in economics at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Economists are employed by federal, state or territory government departments; employer organisations and trade unions; financial institutions (such as banks and insurance companies); other commercial organisations; and private consulting firms. Competition for available positions is strong and postgraduate study is recommended to improve employment prospects. Graduates often find work in administration,

management and marketing. The demand for economists depends on the level of government and private research and analysis, as well as economic activity levels.

Related Jobs

Accountant (p 50); Actuary (p 50); Bank Officer (p 53); Financial Dealer and Broker (p 57); Marketing Officer (p 74); Mathematician (p 242); Parliamentarian (p 159); Research Officer (p 244); Statistician (p 245).

Entrepreneur

An entrepreneur is a broad title and can refer to people in many different industries. The traditional view is of someone who establishes a business, often as a start-up, and builds it to success. Once the business develops and involves more employees, the entrepreneur will often take a position as a manager or high-level executive. Depending the trajectory of the company, the entrepreneur may then become a board member for the corporation.

The key role of an entrepreneur is to nurture the beginnings of the business, using their skills, motivation and acumen to push it past the early obstacles. An entrepreneur will use their logic and reasoning skills to identify the strengths and weaknesses of solutions, conclusions or approaches. Entrepreneurs appear in every type of industry. From the medical profession to retail, entrepreneurship requires a good idea and the motivation to see it through to fruition. In the beginning, an entrepreneur will be responsible for marketing and advertising, finding investment capital, creating and delivering the product or service, and every function of the business. An entrepreneur will need to have the conceptual thinking skills to validate their business idea, or work with someone who brings those skills. A shortfall in the skills needed means that entrepreneurs often work in pairs or teams to build their business.:

Entrepreneurs can come from all walks of life and create a new business at any age.

Personal Requirements

- Critical Thinking
- Attention to detail
- Strong communication skills
- Patience
- Ability to work to deadlines
- Ingenuity and creativity
- Strong oral and written comprehension and communication.

Education and Training

There is no one course or qualification that will create an entrepreneur and many have no formal business qualifications, or any qualifications at all. The nature of starting a business means a steep learning curve, with entrepreneurs learning as they build and grow their business. An entrepreneur should be relatively knowledgeable about business administration. Undergraduate qualified entrepreneurs may also pursue postgraduate study, with an MBA being a popular choice for business founders.

Employment Opportunities

Being an entrepreneur doesn't offer a single, defined career path and job websites won't have any listings for "entrepreneurs". Becoming an entrepreneur requires a business idea and vision, as well as a high level of self-motivation. A successful entrepreneur will have independence and flexibility, and will direct all business actions for a company.

Financial Dealer and Broker

$2,298 | Very high skill | Stable

Also known as Investment Adviser and Sharebroker

Financial dealers and brokers conduct financial market transactions on behalf of clients and offer advice on financial matters.

Financial dealers and brokers:

- obtain information on securities, market conditions, government regulations and the financial circumstances of clients
- deal in the marketplace on behalf of clients
- record and give 'buy' and 'sell' orders
- calculate and record transaction costs
- develop lists of appropriate investments for clients
- plan buying and selling activities.

Specialisations

- Commodities Trader
- Financial Market Broker
- Financial Market Dealer
- Investment Banker/Merchant Banker

Personal Requirements

- Good communication and relationship-building skills
- Able to make calculations quickly and accurately
- Aptitude for using computers
- Able to work independently
- Able to work under pressure
- Aptitude for research
- Analytical and planning skills
- Interested in the financial market

Education and Training

To become a financial dealer and broker you usually have to complete a degree in commerce, accounting, finance, economics or actuarial studies at university. Entry to this occupation may be improved if you have a double degree (possibly combining a relevant field with law).

To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics

are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Depending on the specific role, a postgraduate qualification may be required. You may also need to be licensed or registered in order to work in this field. In order to be licensed, you must meet the training requirements administered by the Australian Securities and Investments Commission (ASIC). Details can be found on the ASIC website (www.asic.gov.au). You may also be required to become a member of a particular professional association. Contact the Australian Financial Markets Association or the Financial Services Institute of Australasia (Finsia) for further information.

Employment Opportunities

Entry to this career is competitive. Firms usually recruit applicants who can demonstrate a strong academic background. It takes some time to gain the experience required for advancement, and many firms demand specialised qualifications or relevant experience.

Financial dealers and brokers work in stockbroking firms, financial planning organisations, banks, building societies, accounting and law practices and other organisations within the finance and investment sector.

While there is an increasing demand throughout the country for financial services, banks and other financial institutions are increasingly focusing their dealer functions in their head offices in Brisbane, Sydney and Melbourne.

Related Jobs

Accountant (p 50); Actuary (p 50); Bank Officer (p 53); Debt Collector (p 55); Economist (p 56); Financial Planner (p 58); Insurance Agent (p 60); Insurance Officer (p 61); Valuer (p 66).

Financial Planner

$2,307 | Very high skill | Stable

Also known as Financial Adviser

Financial planners develop and implement financial plans for individuals covering all areas of finance, including taxation, retirement, superannuation, insurance and estate planning.

Financial planners:

- interview clients to determine their financial status and objectives, discussing financial options and developing financial plans and investment strategies
- monitor investment performance, and review and revise investment plans based on changes in the market
- arrange to buy and sell stocks and bonds for clients
- advise on investment strategies, sources of funds and distribution of earnings
- set financial objectives, and develop and implement strategies to achieve them
- assist clients in meeting superannuation compliance requirements
- direct the collection of financial, accounting and investment information and the preparation of budgets, reports, forecasts and statutory returns.

Specialisations

- Stockbroker

Personal Requirements

- Good communication skills
- Able to work under pressure
- Aptitude for research
- Good with numbers
- Analytical and planning skills
- Interested in the financial market

Education and Training

To become a financial planner you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a financial planner by completing a degree in finance, financial planning or financial services at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Depending on the specific role, you may need to be licensed or registered in order to work in this field. Any person who provides advice about financial products to retail clients must satisfy the requirements contained in the Regulatory Guide 146 (RG 146) administered by the Australian Securities and Investments Commission (ASIC). Details can be found on the ASIC website at www.asic.gov.au. Before enrolling into a financial planning course, you should contact the institution to ensure it complies with ASIC's training regulations.

Employment Opportunities

Entry to this career is competitive. Firms usually recruit applicants who can demonstrate a strong academic background. It takes some time to gain the experience required for advancement, and many firms demand specialised qualifications or relevant experience.

Financial planners work in financial planning organisations, banks, building societies and other organisations within the finance and investment sector.

People in this occupation have a legal obligation to provide sound advice, which means that the job has considerable responsibility attached to it.

Growth Manager

Also known as Growth Marketer and Growth Hacker

Growth managers are responsible for growing and optimising a business' demand and revenue.

Growth managers:

- develop strategic marketing plans to drive growth and maximise return on investments
- lead campaigns from conception to defining objectives, execution, tracking and reporting
- manage online and offline campaigns across a range of marketing channels
- test and optimise new channels, audiences, bidding strategies and content
- monitor, analyse and report on key performance indicators to ensure marketing initiatives are making profits
- use web analytics and business intelligence tools to better understand customers and insights in marketing campaigns.

Growth managers work in a highly collaborative environment and may work with teams in product development, sales and marketing.

Personal Requirements

- Good leadership and project management skills
- Strong communication skills
- Strategic, analytic and creative thinker
- Good attention to detail

Education and Training

To become a Growth Manager, you may benefit from a degree in marketing, business or computer science.

As Growth Management is a relatively new industry and subject to a lot of change on a month-to-month basis, specialists are required to stay up to date with new developments and conduct their own research.

Employment Opportunities

Growth managers may work for start-ups, local councils, state government or other large organisations in a range of industries.

Related Jobs

Business Systems Analyst (p 54); Marketing Officer (p 74); Sales Representative (Information Technology) (p undefined).

Human Resources Officer

Human resources officers provide administration services for the recruitment and employment of staff. In small organisations, human resources officers are usually responsible for all staffing matters. In large organisations they may specialise in a particular area such as recruitment, wages and entitlements or staff training.

Human resources officers:

- determine staffing numbers, skills and needs to meet the organisation's objectives
- analyse the skills and qualities required for each particular job and develop job descriptions and duty statements
- advertise staff vacancies, assess applications, interview applicants, administer selection tests, prepare reports and make recommendations to management about staff appointments
- maintain the personal records of employees on matters such as wages, superannuation, leave and training, and prepare associated management reports
- arrange and conduct staff training
- use a number of management information systems to record, maintain, plan and manage the organisation's human resources
- provide advice and information to management and employees on human resource policies and procedures, including equal opportunity, anti-discrimination and occupational health and safety programs
- assist employees with work matters, career development, personal problems and industrial matters
- organise employee welfare services such as health and wellbeing programs, first aid and fire warden training, superannuation and social activities
- take part in enterprise bargaining talks where employees, management and unions discuss the development of specific work arrangements and conditions (pay and hours of work, for example)
- help implement organisational changes (such as those following from industrial relations legislation, revised job classification structures or technological changes)
- take part in strategic management.

Personal Requirements

- Good planning, organisational, analytical and decision-making skills
- Good oral and written communication skills
- Tactful and discrete when dealing with people and confidential information

Education and Training

To become a human resources officer you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

The Australian Human Resources Institute offers short courses and VET qualifications in human resources. The Recruitment and Consulting Services Association (RCSA) also offers related short courses and VET qualifications. Contact the institutions for further information.

You can also become a human resources officer through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Alternatively, you can become a human resources officer by completing a degree in human resource management, or business or commerce with a major in human resource management. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

A degree in a related area such as industrial relations, psychology, management or economics may also be useful in gaining employment.

Employment Opportunities

Human resources officers are employed by both small and large organisations in industries such as banks, insurance companies, hospitals, manufacturing firms, airline and shipping companies and large retail stores. They are also employed by federal and state or territory government departments.

Some people establish their own businesses as human resources consultants or find employment with human resources firms that offer outsourced human resources functions to clients.

Related Jobs

Career Development Practitioner (p 122); Hospital Administrator (p 175); Management Consultant (p 61); Occupational Health and Safety Officer (p 178); Public Servant - Australian Public Service (p 163); Trade Union Official (p 327).

Importer and Exporter

Importers and exporters sell and buy goods, such as raw materials, foodstuffs and manufactured goods, produced in Australia for export to overseas markets, or procure products made overseas for import to Australian markets.

Importers and exporters:

- supervise and coordinate the marketing activities of overseas distributors/agents and assist with administrative, sales and marketing functions

- investigate and assess overseas demand for goods produced in Australia or local demand for goods produced overseas
- research and comply with legal requirements affecting import and export of goods to and from Australia
- discuss orders and arrange for the production of goods with suppliers and distributors/agents
- arrange the shipment of goods, ensuring that all customs barrier control procedures and other documentation requirements are satisfied
- arrange payment for goods, ensuring these payments meet financial regulations in Australia and overseas
- liaise with freight forwarders and customs brokers, who make freight and space bookings with airline or shipping companies and arrange for the movement of cargo from airports and wharves
- monitor the performance of the business and prepare financial statements, and report on import/export operations
- negotiate contracts and agreements with end buyers/sellers and with distributors and agents
- ensure product intellectual property (brand name, design or patents) is registered and protected in the countries where they are sold.

Personal Requirements

- Good communication and negotiation skills
- Good understanding of commercial activity
- Research and administrative skills
- Basic mathematical skills
- Ability to speak one or more foreign languages is highly desirable (a considerable amount of overseas travel may be required)

Education and Training

You can work as an importer and exporter without formal qualifications, but employers usually require Year 10. You will probably get some informal training on the job.

Additional Information

With relevant work experience, graduates may be eligible for membership of the Export Council of Australia.

Employment Opportunities

Importers and exporters are mainly self-employed in small businesses, although some may work for larger companies. Staff with specialist import/export knowledge and skills are also employed by banks and government departments. People with relevant formal qualifications may have greater opportunity for employment. New entrants usually commence in the distribution or sales area of the firm. Training varies according to the size of the firm and the products traded. Most people need five years of experience in less complex areas such as distribution or sales in order to develop basic knowledge and skills.

Related Jobs

Retail Buyer (p 268).

Insurance Agent

$1,768 | Medium skill | Stable

Insurance agents represent insurance companies and sell insurance to clients, including individuals and organisations.

Insurance agents:

- draw up lists of clients from a variety of sources
- contact potential clients, usually by telephone, to arrange interviews
- research new insurance products to assist current and potential clients in making choices
- interview clients to identify their insurance needs and how insurance policies might meet those needs
- write an insurance recommendation list or plan to assist the client to make an informed decision
- explain policy details to clients, including the risks for which they are covered, the rates and the benefits
- recommend an appropriate amount and type of cover to individual clients
- collect premiums and keep records of payments
- regularly review clients' circumstances to ensure the level of insurance is appropriate
- assist clients in the event of a claim
- negotiate with insurance companies on behalf of clients.

Some insurance agents are also licensed financial planners and/or investment advisers.

Personal Requirements

- Good communication skills
- Good interpersonal skills
- Perseverance and motivation
- Aptitude for working with figures
- Confidence in selling products
- Neat personal appearance

Education and Training

You can work as an insurance agent without formal qualifications, but most employers usually require you to gain your Senior Secondary Certificate of Education. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become an insurance agent through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Insurance agents usually represent a particular insurance company. They may work in either city or country areas.

Most insurance agents work on a commission basis, with the level of business dependent upon the level of general economic activity. However, earnings and continued employment in this occupation depend on both ability and experience.

Related Jobs

Property Manager (p 62); Real Estate Salesperson (p 63).

Insurance Broker

Insurance brokers act on behalf of their clients, providing professional and technical advice about commercial, corporate and personal insurance products from a range of companies according to their clients' individual needs.

Insurance brokers:

- draw up a list of potential clients
- make contact with these clients to see if they are interested in insurance
- interview prospective clients to explain the details of an insurance policy and make recommendations on the amount and type of cover that may be required
- research and review available insurance products to ensure clients are given the best and most appropriate offer
- negotiate policy premiums and conditions with insurers on behalf of clients
- arrange insurance according to client instructions
- regularly review client circumstances to ensure their level of cover is appropriate
- market their services to increase their number of clients
- collect premiums on behalf of insurers.

Personal Requirements

- Aptitude for numbers and calculations
- Sound judgment
- Perseverance and motivation
- Good negotiation skills
- Strong attention to detail
- Good communication skills

Education and Training

To become an insurance broker, you usually have to complete a VET qualification. In addition, several years of experience with a qualified broker are usually required before becoming an independent broker. Entry to these courses usually requires Year 12 and, as a minimum, employment with an insurance brokerage. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Employment Opportunities

Most insurance brokers sell policies for several companies. They may work in city or country areas. Insurance brokers usually work on a commission basis, with the level of business dependent upon the level of general economic activity. However, earnings and continued employment depend to a considerable degree on ability and experience.

Insurance Officer

Insurance officers carry out clerical and other functions associated with insurance transactions.

There are two broad types of insurance:

- life insurance, which can provide investment and/or life and disability protection; and general insurance, which can cover property in a variety of events (such as fire, water damage, theft of goods and property, marine cover, illness, accident and liability cover).

Personal Requirements

- Aptitude for numbers and calculations
- Sound judgment
- Strong attention to detail
- Good communication skills
- Aptitude for working with computers

Education and Training

You can work as an insurance officer without formal qualifications, but most employers prefer you to gain your Senior Secondary Certificate of Education. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification in general insurance, life insurance, personal injury management, loss adjusting or insurance broking. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become an insurance officer through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

As an insurance officer, you may be eligible for membership of the Australian and New Zealand Institute of Insurance and Finance.

Employment Opportunities

Insurance officers are employed by insurance and finance companies. They may sell insurance and usually work for wages rather than commission, making competition for available positions strong. Prospects for promotion are better for those prepared to undertake further study in fields such as commerce, economics, law, computer science and mathematics.

An entrant to an insurance company generally starts as a clerk and can progress through various departments to positions such as inspector, claims officer, re-insurance officer, loss adjuster, marine underwriter or manager.

Related Jobs

Actuary (p 50); Bookkeeper (p 54); Conveyancer (p 286); Customs Broker (p 55); Financial Dealer and Broker (p 57); Insurance Agent (p 60); Stock and Station Agent (p 66).

Management Consultant

Management consultants provide advisory services to organisations (public, private and not-for-profit) regarding management problems, challenges and opportunities.

Management consultants:

- gather information on the function of each area within an organisation (and the specific duties undertaken by each individual) by talking with managers or supervisors and interviewing other staff
- assess the types of tasks undertaken in each section, the methods or systems used, the length of time taken for an individual to complete a task and any problems involved in undertaking the task
- consult internal training manuals, files and job descriptions to obtain additional information
- study data such as statistical records, reports and organisational charts

- identify problem areas and find solutions by considering alternatives, taking into account the benefits and costs of any recommendations
- write detailed reports and provide statistical evidence to support their conclusions and recommendations
- assist in the implementation of new systems
- talk to experts in other fields when introducing new equipment such as computers.

Management consultancy work is sometimes carried out by people who are employed in another capacity, such as engineers, personnel workers, technicians, computer programmers or systems analysts.

When assessing an organisation's systems, they may have to work at that organisation's premises.

Personal Requirements

- Able to identify, analyse and solve problems
- Able to think logically and objectively
- Organisational skills
- Good oral and written communication skills
- Tactful and discrete
- Interested in people, processes and resource management

Education and Training

To become a management consultant you usually have to complete a degree in commerce, business or business administration with a major in management, entrepreneurship or human resource management. You could also consider a course with a major in economics. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

If you wish to work in the manufacturing industry, degrees in industrial, manufacturing and production engineering may also be relevant.

Employment Opportunities

Management consultants may work with a consultancy firm, or may be self-employed. They may also find employment with government departments and commercial or industrial organisations.

Job opportunities depend on the level of business activity, industry restructuring and advances in technology that require changes to workplace practices and systems.

Related Jobs

Accountant (p 50); Analyst (Information Technology) (p 80); Human Resources Officer (p 59); Industrial Engineer (p 141); Occupational Health and Safety Officer (p 178); Recruitment Consultant (p 64); Workplace Relations Officer (p 67).

Personal Assistant

Personal assistants liaise, organise and coordinate a range of tasks in support of a manager or executive.

Personal assistants:

- carry out administrative duties
- act as the first point of contact
- keep track of calendar and appointments
- make travel and accommodation arrangements
- manage databases and filing systems
- liaise with other staff and clients
- collate and file expenses
- create and maintain confidential files, reports and records.

The purpose of a Personal Assistant's role is to free an executive's time from administrative tasks to allow them to focus on more strategic work. The duties of a personal assistant will vary a great deal according to the person they work for and the organisation they work within.

Specialisations

- Executive Assistant

Personal Requirements

- Communication and listening skills
- Organisational skills
- Ability to work independently
- Problem-solving and initiative
- Ability to multitask and prioritise
- Flexibility and adaptability

Education and Training

A formal qualification is not required, and some on-the-job training may be provided; however, a course in business administration or similar may be advantageous. Entry to this occupation may be improved if you have qualifications, such as a VET qualification.

Employment Opportunities

A personal assistant may be hired to assist an individual in any size or type of organisation. They may also be hired independently on behalf of an individual or family.

Related Jobs

Events Coordinator (p 263); Public Relations Officer (p 75); Receptionist (p 267); Secretary (p 65).

Property Manager

Property managers manage and supervise the letting of commercial, residential, industrial and retail rental properties on behalf of their owners.

Property managers:

- market vacant properties for lease and organise viewing sessions for prospective tenants
- perform background checks of references, employment and rentals before selecting suitable tenants
- negotiate lease terms and conditions and ensure that they are observed
- collect and hold bond and rent monies from tenants
- manage other accounts and finances such as insurance and budget requirements
- arrange and perform regular property inspections
- monitor property condition and arrange for maintenance or repair
- advise on market rents and conduct rent reviews to assess the current rental price
- represent property owners at residential tribunal hearings.

Property managers often work irregular hours, including weekends. This occupation involves a great deal of contact with the public and with associated professionals, such as builders, plumbers and electricians.

Personal Requirements

- Good communication and negotiation skills
- Good presentation and a pleasant manner
- Able to work independently
- Excellent organisational skills and attention to detail
- Good working knowledge of the local area

Education and Training

To become a property manager, you usually have to complete a nationally accredited short course or a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a property manager through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Property managers often work in the residential sector, but are also employed by corporations and financial institutions in areas such as retail and industrial property.

Employment opportunities for this occupation vary depending on the state of the real estate industry. The property market is very sensitive to the general state of the economy and factors such as government policy and interest rates.

Related Jobs

Auctioneer (p 52); Insurance Agent (p 60); Real Estate Salesperson (p 63); Valuer (p 66).

Real Estate Salesperson

Real estate salespeople arrange the sale of land, residential properties (such as houses and flats), businesses, factories, shops and farms on behalf of the owners.

Real estate salespeople:

- discuss the method of sale, presentation of the property, costs and inspection times with vendors (sellers)
- estimate the current market price and suggest a reserve or minimum selling price by preparing a Comparative Market Analysis (CMA)
- list details of land or buildings for sale and arrange the advertising of properties
- assess buyers' needs and locate properties for their consideration
- take prospective buyers to inspect properties
- advise on merits of properties and the terms of sale
- arrange legal agreements between vendors and buyers
- arrange finance and insurance.

Real estate salespeople often work irregular hours, including weekends. This occupation involves a great deal of contact with the public and with associated professionals, such as builders, valuers, solicitors, conveyancers, and banking and local government personnel. Real estate salespeople may specialise in areas such as residential, commercial or business sales.

Personal Requirements

- Good communication and negotiation skills
- Good presentation and a pleasant manner
- Able to network effectively
- Able to work without direct supervision
- Strong sales focus
- Good organisational skills and attention to detail
- Good working knowledge of the local area

Education and Training

To become a real estate salesperson you usually have to complete an accredited short course in real estate or property services or a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a real estate salesperson through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Real estate salespeople need to register with the relevant department in their state or territory. To be eligible for registration, you need to complete accredited training, obtain a National Police Certificate, and be 18 years or older. Depending on the responsibilities of the role, a licence may also be required.

Employment Opportunities

Real estate salespersons may be employed or specialise in areas such as residential, commercial and business sales. Employment opportunities for this occupation vary depending on the state of the real estate industry. The property market is very sensitive to the general state of the economy and factors such as government policy and interest rates.

Related Jobs

Auctioneer (p 52); Conveyancer (p 286); Insurance Agent (p 60); Valuer (p 66).

Records Officer

Records officers are responsible for the creation, storage, retrieval and disposal of all recorded information about an organisation's activities. Information can come in many formats, such as digital, photographic, film or paper. This information contributes to what is often called the 'corporate memory' of the organisation, without which an organisation could not function properly or be held accountable for its actions.

Records officers:

- research and analyse the information needs of an organisation and develop procedures to meet those needs
- undertake audits of information created and stored within the organisation
- establish the duration for which records are to be kept according to policy and legislative requirements
- develop policies for the distribution and storage of records, including the incorporation of new information technologies into the organisation
- create and maintain databases for the control and retrieval of information
- provide support to meet regulatory, accountability and transparency requirements of organisations
- interpret freedom of information, archives and records and privacy legislation as it governs access to organisation information.

Records officers must work closely with all staff members to make sure that the information systems of the organisation meet their needs and the organisation's objectives.

Personal Requirements

- Good planning and organisational skills
- Good problem-solving skills
- Good communication skills
- Able to work as part of a team
- Attention to detail

Education and Training

To become a records officer, you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information. You may be able to study through distance education.

You can also become a records officer through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Records and Information Management Professionals Australasia is the professional organisation for records officers. Membership is available at various levels depending on qualifications and experience.

Employment Opportunities

Records officers work in a variety of environments, including federal, state and territory government departments, local councils, commercial firms (such as banks and resource companies), churches and professional associations. It is possible for records officers to move between different organisations and industries.

Self-employment is possible, mainly through contract work in setting up new record systems and by advising firms on methods of improved record storage and retrieval. With experience, and sometimes further training, records officers may progress into team leader, coordinator and managerial roles.

Recruitment Consultant

Also known as Recruiter

Recruitment consultants interview applicants to determine their job requirements and suitability for particular jobs, assess their training needs and help employers to find suitable staff. Recruitment consultants in private industry may also specialise; some may work primarily with office and clerical job seekers, while others work only with professional and executive level recruitment. It is possible to specialise by industry — for example, several consultancies recruit exclusively in the computer industry.

Recruitment consultants:

- interview people looking for work, and record relevant personal and work details to match them with appropriate jobs
- receive and record job vacancy information from employers
- organise advertising, interviewing and selection processes for recruitment campaigns
- conduct and analyse psychometric (personality, behavioural style, ability or aptitude) tests
- interview jobseekers and prepare shortlists of candidates for referral to prospective employers
- check references and suitability of applicants before referring to employers
- prepare résumés and correspondence for suitable applicants to forward to employers
- advise jobseekers regarding personal presentation at interviews and about their written applications and résumés
- arrange appropriate training in job skills
- assist with sales and marketing duties designed to increase the client base, including visiting employers to assess working conditions and discuss consultancy services and fees
- observe jobs to obtain information about job requirements
- prepare job descriptions and letters of appointment
- prepare rosters and duty statements, as well as organise security passes and identification.

Consultants in private industry often work long hours to interview jobseekers who are not available during normal business hours.

Personal Requirements

- Good intuition and understanding of people's qualities
- Good analytical and decision-making skills
- Good oral and written communication skills
- Tactful and discrete when dealing with people

Education and Training

You can work as a recruitment consultant without formal qualifications, but employers usually prefer you to gain your Senior Secondary Certificate of Education. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications and you may like to consider a VET course. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a recruitment consultant by studying human resource management, behavioural science, psychology or a related field at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

The Recruitment and Consulting Services Association (RCSA) also offers a variety of qualifications and training courses for those wishing to enter the field. Contact the RCSA for more information.

Additional Information

With appropriate training and experience, graduates can apply for membership of the RCSA. There is a range of membership types available to those at various stages in their career.

Employment Opportunities

Recruitment consultants are employed in both the public and private sectors. Positions are regularly advertised in metropolitan and national newspapers. Some recruitment consultants also establish their own businesses.

Related Jobs

Human Resources Officer (p 59); Management Consultant (p 61).

Sales Representative

Sales representatives sell goods and services to industry, business and professional establishments, as well as to wholesale or retail outlets.

Sales representatives:

- visit clients to demonstrate use of products, show samples and take orders
- arrange a schedule of visits to major potential buyers by contacting people and making appointments
- develop and update knowledge of their own products and the products of their competitors
- speak with other sales and marketing personnel in their company to determine the best methods of promoting products
- establish customers' needs and explain and demonstrate products to them, which may involve providing technical descriptions of products and how they may be used
- quote and negotiate prices and credit terms
- prepare contracts and record orders
- report to employers on sales and provide feedback about the marketing of new or established products
- carry out formal presentations of products using videos and other training aids, attend promotional markets and organise product displays
- work on telemarketing campaigns
- plan and work towards meeting sales targets and budgets
- use e-business technology.

Sales representatives spend a lot of time travelling from one location to another, including country and interstate locations. Meeting sales targets and budgets can be stressful.

Personal Requirements

- Enjoy working with people
- Friendly and confident manner with a pleasant personality
- Able to work without direct supervision
- Able to clearly present product and service information
- Good personal presentation
- Excellent communication skills

Education and Training

You can work as a sales representative without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have relevant sales qualifications.

To work as a sales representative in a specialised or technical area, you will usually need to undertake post-secondary study in that area. For example, chemical sales representatives often need tertiary or technical qualifications, plus experience, in fields such as science or engineering to work in industrial chemical sales. As subjects and prerequisites may vary between institutions, you should contact your chosen institution for further information.

You can also become a sales representative through a traineeship. Entry requirements may vary, but employers generally require you to gain your Senior Secondary Certificate of Education.

Additional Information

A drivers licence is usually required.

Employment Opportunities

Sales representatives are employed by retail, wholesale, insurance and manufacturing organisations, which are usually located in large cities. They may be required to cover city, suburban or country areas, or in some cases, interstate or overseas territories.

When taking on a sales position, ensure that you understand the terms of employment. Some jobs are paid on a 'commission only' basis. Other jobs offer a 'guaranteed' income, but this payment may be advanced against future commission earnings and could be reclaimed by the employer when you leave. If you are employed as a subcontractor, you will effectively be in business for yourself, without entitlements to sick pay, annual leave or other benefits.

Related Jobs

Advertising Account Executive (p 51); Importer and Exporter (p 59); Insurance Agent (p 60); Market Researcher (p 73); Marketing Officer (p 74); Retail Buyer (p 268).

Secretary

Secretaries assist professionals, managers and executives by performing clerical and secretarial duties.

Secretaries:

- screen telephone callers
- make and record appointments
- operate office equipment such as photocopiers, fax machines, switchboards and computers
- file correspondence and other records
- receive and process incoming and outgoing mail
- write letters and reports on behalf of the organisation
- store and retrieve data on computers
- talk to clients
- prepare agendas or programmes for meetings
- attend and take minutes of meetings, both in the office and at other locations
- organise business itineraries, travel arrangements, conferences, meetings and social functions
- hire and supervise staff
- maintain budget and account records
- purchase office supplies.

The duties secretaries perform vary a great deal according to the size and type of organisation in which they work. Experienced secretaries may advance to positions of higher responsibility.

Personal Requirements

- Good command of the English language, both written and spoken
- Sound organisational and interpersonal skills
- Able to work under pressure and meet deadlines
- Able to work independently
- Aptitude for working with computers
- Neat personal appearance
- Able to act with tact and discretion.

Education and Training

To become a secretary, you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information. You may be able to study through distance education.

You can also become a secretary through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Secretaries may work in a variety of industries. Most work in medical centres, law and accounting firms, retail and wholesale firms, factories, travel agencies, hotels, motels, hospitals, schools, large hairdressing salons and other professional offices. The extent of work duties depends on the individual's knowledge of what is required, their willingness to accept responsibility and the structure of the work area. Experience in a variety of clerical duties may be needed for office workers to move from one position to another and into other areas of administration.

Related Jobs

Personal Assistant (p 62); Receptionist (p 267).

Stock and Station Agent

Stock and station agents advise and represent farmers and graziers in business transactions such as the buying and selling of livestock, wool, fertiliser, farming and grazing land, equipment and merchandise. Stock and station agents may specialise in livestock buying and selling, auctioneering, property and merchandise sales, arranging finance and insurance, pastoral inspections, and stud stock or wool. They may be classified as grain merchants, wool buyers or wool merchants.

Stock and station agents:

- study market trends and prices
- arrange transport of stock to saleyards
- take prospective buyers to inspect properties for sale
- assist with selecting livestock, as well as commercial and stud stock
- value livestock and advise on different marketing options for stock
- arrange the penning and auction of livestock
- arrange clearing sales of machinery and plant equipment that is no longer required
- advise and assist clients with the management of agricultural or pastoral companies, stock or farming problems
- conduct sales of wool on behalf of clients, usually on a commission basis
- sell a wide range of agricultural products, including chemicals used in farming and grazing enterprises
- write reports on business transactions
- arrange finance for the buying of livestock or property
- act as agents for insurance companies
- arrange private sales between sellers and buyers.

Stock and station agents usually travel a lot by car, work long hours and are often required to contact clients during the evening.

Personal Requirements

- Interested in the rural industry
- Able to take initiative
- Self-motivation
- Good organisational skills
- Good communication skills

Education and Training

To become a stock and station agent you usually have to complete an accredited short course in real estate or a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a stock and station agent through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

The Australian Livestock and Property Agents Association is the national peak industry body for livestock and property agents.

Employment Opportunities

Stock and station agents may be employed by large pastoral companies or small private agencies. The demand for stock and station agents depends on the state of the rural industry, which is affected by factors such as interest rates, commodity markets, overseas prices for primary products and seasonal conditions. With experience, and sometimes further training, stock and station agents may progress to senior positions such as branch manager or area manager, or to executive areas of finance, real estate and insurance.

Related Jobs

Auctioneer (p 52); Bookkeeper (p 54); Farm Hand (p 32); Farmer (p 33); Insurance Officer (p 61); Property Manager (p 62); Real Estate Salesperson (p 63); Valuer (p 66).

Valuer

Valuers assess land, property and other items such as commercial equipment and objects of art, and provide advice about the administration and commercial use of land and property. Valuers generally specialise in a particular type of valuation according to their knowledge and experience, such as real estate or art. Valuers have a lot of contact with the public and may be required to spend a lot of time travelling.

Valuers:

- examine items and select appropriate methods of evaluation
- calculate values by considering market supply and demand, condition of items, future trends and other factors (location, size, topography, zoning legislation, and the availability of services, such as transport, community facilities and parking, in the case of real estate, for example)
- submit written assessments of value
- provide consultancy advice about valuation matters
- give evidence in legal proceedings and mediate valuation matters
- provide rental valuations for arbitration purposes.

Valuations are made for many different purposes, such as rating and taxing, finance, financial reporting, investment, insurance, rental, sale and purchase. A significant proportion of a valuer's time is also spent writing reports. A valuer's competence is largely judged on the quality and thoroughness of a report.

Personal Requirements

- Good character and reputation
- Good communication skills
- Reasonable ability in mathematics
- Sound judgment and good analytical skills

Education and Training

To become a valuer you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further

information.

You can also become a valuer by studying property, property economics or valuation at university. To get into these courses you usually need to gain your Senior Secondary Certificate of more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Valuers are employed by government departments or in the private sector. New or trainee valuers may spend part of their time on other tasks such as real estate sales or property management. In the private sector, most valuers are employed by valuation firms, auction houses, real estate agencies and various financial institutions such as banks, insurance companies and building societies. There are also opportunities for self-employment.

Related Jobs

Conveyancer (p 286); Financial Dealer and Broker (p 57); Lawyer (p 196); Property Manager (p 62); Real Estate Salesperson (p 63).

Workplace Relations Officer

Also known as Employee Relations Officer and Industrial Relations Officer

Workplace relations officers manage employment conditions and related issues. Workplace relations officers aim to encourage employees and employers to work towards effective organisational practices. They may represent industrial, commercial, union, employer or other organisations in workplace and industrial negotiations.

Workplace relations officers:

- advise on the operation of industrial awards and agreements
- undertake negotiations on rates of pay and conditions of employment for employees and employers through enterprise bargaining negotiations
- represent employees or employers before workplace relations tribunals on matters such as enterprise bargaining agreements, disputes and termination of employment
- develop and administer policies on different employee classifications, wage structures and related matters
- establish and maintain good relationships between employers and employees
- examine and attempt to resolve workplace disputes and grievances (by acting as the management representative in discussions with trade unions about the effects of technological change on the duties of employees in a manufacturing workshop, for example)
- study and interpret relevant workplace relations legislation (the laws formulated by parliament to control industrial practices in the workplace)
- advise others on the proper procedures for carrying out negotiations and on the special regulations relating to employment and salary agreements
- conduct research into particular workplace relations issues (such as the effects of changes in work practices on productivity).

The work of workplace relations officers varies according to where they are employed. Those employed by organisations with a large workforce aim to minimise workplace disputes by acting as a communication link between management and employees. Those working for employer associations or trade unions aim to protect the interests of the group they are representing.

Personal Requirements

- Good communication skills
- Good conflict-resolution and negotiation skills
- Willing to work within rules (legislative and legal)

Education and Training

To become a workplace relations officer you usually have to complete a degree with a major in industrial relations and/or human resource management. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Workplace relations officers may be employed by large private or public sector organisations, employer associations, trade unions or government. Some may progress to consultant and principal consultant roles within organisations or work for themselves. Their duties often include human resource management. New graduates may have difficulty obtaining immediate employment in workplace relations and may have to work initially in a related field, such as human resources. Prospects are better for experienced workplace relations officers who have proven their ability in this area.

Related Jobs

Human Resources Officer (p 59); Lawyer (p 196); Occupational Health and Safety Officer (p 178).

Communications

Studying communications can appear glamorous, especially if you can see yourself door-stopping the Prime Minister or presenting a current affairs show. While some graduates do make it here, many communications roles are not in journalism — you could also end up producing a show, writing press releases, monitoring the news or managing corporate internal communications.

Courses and specialisations

Some of the majors you can study in this field include advertising, creative writing, digital media, editing and publishing, film, journalism, media studies, professional writing, public relations and radio.

Most communications courses offer training in media practice while still allowing you to try out a few specialisations. If you're struggling to pick a specialisation, you might want to choose a more general course. A course with a title like arts, communications and media is more likely to offer a broader, more theory-based education.

Where to study

When it comes to distinguishing yourself, your degree will be less important than work experience and industry involvement. Contacts are everything, and once you have a foot in the door (through volunteering or internships) you'll be in a better position to find employment.

When looking at courses, look at the institution's industry connections, facilities and learning opportunities. Some of the most popular courses have high cut-off scores or require a portfolio. You can count on needing good marks in subjects such as English and media.

Five-star universities

Educational experience

BOND	94.2%
UniSQ	93.3%
NOTRE DAME	91.7%
TASMANIA	91.4%
FLINDERS	85.7%
SUNSHINE COAST	85.5%
CQUni	85.0%

National average
77.3%

Graduate employment

UWA	82.1%
TASMANIA	77.1%
SYDNEY	72.0%
SOUTHERN CROSS	70.8%
CSU	69.1%
MONASH	68.6%
UNE	68.5%

National average
58.5%

Learner engagement

BOND	92.8%
MELBOURNE	78.7%
ECU	77.0%
NOTRE DAME	75.0%
GRIFFITH	73.1%
MONASH	67.3%
VU	67.2%

National average
56.9%

Learning resources

BOND	96.8%
UniSQ	96.0%
TASMANIA	92.1%
UniSA	91.0%
FLINDERS	89.8%
NOTRE DAME	89.5%
MONASH	89.2%

National average
83.1%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

11,115
Undergraduate

6,932
Postgraduate

5,789
International undergraduate

What can I do?

- Public relations
- Government research and policy
- Journalism
- Media
- Advertising
- Publishing

Graduate starting salary

$42,000
Undergraduate

$49,800
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

58.5%
Undergraduate

70.2%
Postgraduate

Five-star universities

Median starting salary

UWA	$60,300
SYDNEY	$54,000
SOUTHERN CROSS	$51,700
MONASH	$48,200
ACU	$47,800
QUT	$47,400
UniSQ	$46,200
UTS	$46,200

National average
$42,000

Skills development

BOND	97.0%
MELBOURNE	88.6%
ECU	87.1%
CANBERRA	86.7%
LA TROBE	86.4%
UniSQ	86.2%
SYDNEY	86.1%

National average
80.9%

Student support

BOND	96.8%
UniSA	84.8%
SUNSHINE COAST	84.2%
CQUni	82.1%
TASMANIA	82.0%
FLINDERS	81.2%
ECU	80.6%
UNE	80.6%

National average
74%

Teaching quality

BOND	98.5%
TASMANIA	94.0%
UniSQ	93.1%
SUNSHINE COAST	91.1%
CQUni	90.7%
WOLLONGONG	90.4%
NOTRE DAME	88.3%

National average
83.5%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Meet a communications student

Rhea Chatterji

Studying Bachelor of Arts at the University of Melbourne

The choice of over 40 areas of specialisation in the Bachelor of Arts as well as the opportunities within and beyond the classroom enabled Rhea to create her own path – one that's full of possibilities.

'I love to present, I love to write and read. I think this all culminated in my decision to choose the Bachelor of Arts because you can experiment with nearly everything and I was exploring all of my interests. I took those things I love, and I've started to look for career opportunities that could stem from there.

I've had experience in writing for the media, presenting a podcast and developing a marketing campaign. That's three different career options, all of which have been offered to me as part of my degree. I've also been involved in the Students at Work program, which is an internship you can apply for in various fields, and it's been amazing helping me navigate the field of marketing. I've loved it because I get the opportunity to be in a professional environment. It's not like you go in and just observe your co-workers, rather you get to be in the thick of it and practise your skills and learn from each other.'

Future thinking

Careers are evolving fast and new opportunities are emerging every day. At Melbourne, you'll prepare for the future by learning how to use adaptable ways of thinking, setting yourself up for a broad range of professions.

See how at **study.unimelb.edu.au**

POSTERA CRESCAM LAUDE

THE UNIVERSITY OF MELBOURNE

Copywriter

Copywriters interpret how a potential market will react to an advertising proposal, and write material to advertise products or services. With experience, and sometimes further training, copywriters may become creative directors in advertising agencies where they supervise the work of staff in the design area, or advertising managers in retail or manufacturing firms.

Copywriters:

- study products or services to decide the main selling features
- assist art directors to create ideas for advertising and promotion, often thinking up names for products and slogans that appear on packaging and other promotional material
- plan and write promotional material that will appeal to the people most likely to buy the product, and submit copy for approval
- write advertisements for newspapers, magazines, radio, television, cinema screens, billboards, catalogues, displays, websites, blogs and social media
- write brochures, annual reports, documents, speeches and other sales and promotional material
- discuss the theme, style and length of copy with advertisers or management to determine the most suitable approach.

Personal Requirements

- An observant and inquisitive approach to people, their environment and what motivates them
- Creativity and originality
- Able to analyse a situation quickly
- Able to pick out relevant facts and emphasise them
- Able to write clearly
- Good concentration
- Technical ability when writing for all forms of media
- Good time-management skills and able to work under pressure

Education and Training

You can work as a copywriter without formal qualifications. You will probably get some informal training on the job. Artistic and creative abilities are essential. Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification in marketing and communication or professional writing and editing. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information. You can also become a copywriter by studying advertising, marketing, communications, media studies, professional and creative writing, journalism or English at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Although there are no formal education requirements, people who want to become a copywriter may be required to provide a portfolio of creative work to demonstrate their creative flair. The Australasian Writers and Art Directors Association (AWARD) runs a 12-week course each year that is highly regarded in the advertising industry. Visit awardonline.com for more information.

Employment Opportunities

Copywriters are employed by advertising agencies, radio and television stations, advertising departments of retail, wholesale and manufacturing firms, and some government departments. Some are self-employed as freelance copywriters. Competition for entry-level positions is very strong.

Related Jobs

Advertising Account Executive (p 51); Journalist (p 72); Media Presenter (p 74); Multimedia Developer (p 75); Public Relations Officer (p 75); Writer (p 191).

Digital Marketing Specialist

A digital marketing specialist employs techniques to boost visibility and engagement with internet-based content, products and services. They may be involved in coordinating email campaigns and using analytics programs to track website visitors.

A digital marketing specialist:

- gathers and analyses web metrics, including visits, page views per visit, click through-rates and time on site
- identifies key performance indicators (KPIs) from digital campaigns
- optimises analytics tools to track visitor's behaviour patterns
- administers digital media initiatives, including the placement of paid advertisements, email promotions and viral marketing campaigns.

Requires spending many hours sitting while using a computer, either in a commercial office or a home office. Makes extensive use of email and other forms of electronic communication

Personal Requirements

- Able to analyse and interpret information
- Good with computers
- Able to work independently or as part of a team
- Good organisation skills
- Creativity
- Strong organisational skills

Education and Training

You can work as a digital marketing specialist without formal qualifications. You will probably get some informal training on the job.

Entry into the occupation may be improved if you have qualifications. You can become a digital marketing specialist by completing a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you have a degree in business, communications or commerce with a major in marketing. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Digital marketing specialists may be eligible for membership of the Australian Marketing Institute or Australian Market and Social Research Society.

Employment Opportunities

Digital marketing specialists may be employed by companies that manufacture or distribute consumer or industrial goods, or companies that provide private business services. They may

also work in advertising, promotions, insurance and banking organisations. Increasingly, they are employed by government departments and enterprises. Their work will encompass a number of search marketing aspects such as search engine optimisation (SEO) and pay per click (PPC), social media, outreach and site analytics.

Related Jobs

Marketing Officer (p 74); SEO Specialist (p 76).

Editor

Editors read and correct written material for publication, draft and implement editorial policy, decide on the content of publications or news items and manage the production of publications and the staff involved, depending on the position they hold.

Editors:

- make decisions about the content of publications with other senior editors in accordance with editorial policies and guidelines
- review copy to ensure it is free from errors and conforms with style and format rules
- manage the day-to-day running of a newspaper or magazine
- assign staff and photographers to stories
- write articles, editorials or reviews
- edit copy, write headlines and plan the layout of news items
- supervise journalists
- undertake administrative tasks
- work with authors to develop text to a publishable standard.

Editors have to work under pressure when meeting deadlines, especially those who work on daily newspapers.

Specialisations

- Associate Editor
- Book Editor
- Chief Sub-editor
- Commissioning Editor
- Proofreader
- Senior Sub-editor
- Sub-editor

Personal Requirements

- Highly literate, with a sound knowledge of English grammar
- Eye for detail
- Able to concentrate on written work for long periods
- Good general knowledge
- Good organisational skills
- Able to produce detailed and accurate work, often to tight deadlines
- Good management and leadership skills
- Aptitude for using computers

Education and Training

To become an editor you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you have a degree in communications, journalism, professional writing, English, media studies or a related field and provide evidence of a wide range of reading and general interests. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

The Institute of Professional Editors (IPEd) runs a professional accreditation scheme, details of which can be found on its website.

People usually proceed to the position of newspaper editor through the various stages of journalism. Newspaper editors therefore have a great deal of on-the-job experience.

If you have spent some time as an editorial assistant with a publishing company, it may be possible to progress to the position of book editor. After working in other sections of a publishing firm (as a secretary or sales representative, for example), you may be able to move into a trainee editorial position.

Editors are expected to be familiar with computers, including word processing software for editing and publishing layout programs for typesetting.

Employment Opportunities

Editors work in-house for commercial publishers or in publication units within government departments and other organisations. They may also work for organisations that produce publications such as newspapers or magazines. Experienced book editors may work on a freelance or contract basis. Some may form independent publishing houses.

In recent years, the publishing industry has seen a number of mergers and rationalisation of print production. There are now far fewer newspapers and publishing houses to provide entry into the profession. Technological advances have also changed the industry.

Only a few openings occur in publishing houses each year and competition for them is high. It is sometimes possible to enter publishing from an affiliated field, such as desktop publishing, teaching or printing. Advancement is dependent on a keen business and marketing sense, as well as capacity for hard work.

Related Jobs

Copywriter (p 71); Journalist (p 72); Marketing Officer (p 74); Public Relations Officer (p 75); Web Developer (p 90); Writer (p 191).

Journalist

Also known as Reporter

Journalists write and edit news reports, commentaries, feature articles and blogs for newspapers, magazines, radio, television and websites, including online publications. Journalists usually start as cadets and report routine events. In newspapers and on radio and television, most reporters are expected to be 'generalists' who are able to cover almost any topic of interest. With experience, and sometimes further training, journalists may perform a variety of tasks according to their area of specialisation.

Journalists:

- gather news and information by interviewing people and attending events
- undertake research to provide background information for articles
- assess the suitability of reports and articles for publication or broadcasting, ensuring they are within an established

style and format, and edit as necessary
- write articles that comment on or interpret news events, some of which may put forward a point of view on behalf of the publication
- present news on air (television and radio).

All journalists are required to understand the laws of defamation, contempt and copyright. They may have to work long and irregular hours and are often under pressure to meet deadlines.

Journalists may work indoors and carry out interviews by telephone or may have to work outdoors in all kinds of weather. Travel is often required.

Journalists usually start as cadets and report routine events. In newspapers and on radio and television, most reporters are expected to be 'generalists' who are able to cover almost any topic of interest. With experience, and sometimes further training, journalists may perform a variety of tasks according to their area of specialisation. They may also work as editors or progress to the role of editor after several years of experience. see the separate entry for Editor.

Personal Requirements

- Able to write clear, concise, objective and accurate material quickly
- Good general knowledge
- Interest in current events
- Aptitude to learn keyboard and shorthand skills
- Able to speak clearly when working on radio and television

Education and Training

To become a journalist you usually have to complete a degree in journalism or in a related field with a major in journalism, followed by a one-year graduate cadetship involving on-the-job training. Alternatively, you can become a journalist by completing a three-year cadetship, during which you receive instruction and gain experience in practical journalism under the supervision of senior journalists.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education with English. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Cadetships are offered by national, regional and local media organisations. Entry requirements vary, but you will need to demonstrate a passion for journalism and a flair for writing. Competition is very strong. Contact the organisations you are interested in to find out about their cadetship program and application process.

Employment Opportunities

Most journalists work for country, metropolitan and suburban newspapers, magazines, radio and television stations. They may also work for press agencies. Due to changes in the industry, it is common for journalists to work on a freelance basis. Others move into publicity roles in government departments, work as press secretaries for government ministers or work in related fields such as advertising, marketing and public relations.

Related Jobs

Arts Administrator (p 95); Copywriter (p 71); Media Presenter (p 74); Multimedia Developer (p 75); Writer (p 191).

Market Researcher

Market researchers collect and analyse information to assist with marketing and to determine whether a demand exists for a particular product or service.

Market researchers:

- design questionnaires and select sample groups to survey
- collect facts from sources (such as company records) showing the total volume of sales, or from government statistics and information (such as population census data)
- arrange and analyse collected information
- interpret and predict current and future consumer trends, such as changes in tastes and lifestyles
- write reports about the results of research activities
- discuss information needs with clients
- identify specific consumer markets for clients.

Specialisations

- Market Research Analyst
- Market Research Interviewer

Personal Requirements

- Able to analyse and interpret information
- Aptitude for statistics and computers
- Good communication and interpersonal skills

Education and Training

To become a market researcher you usually have to complete a degree in business, management or commerce with a major in marketing. It is also possible for graduates of statistics, psychology, sociology, economics, behavioural sciences or computer science degrees to enter this occupation. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Graduates of marketing courses may be eligible for membership of the Australian Marketing Institute or Australian Market and Social Research Society.

Employment Opportunities

Market researchers may work for organisations that make and market products such as cars, magazines, food, clothing, appliances and other consumer products. They may also work for radio and television networks. In recent years, government bodies have made increasing use of market research services. There are also market research firms that offer their services on a consulting basis.

New graduates sometimes take up market research interviewing jobs in order to break into this field. It is common for market researchers to have to work in the evenings or on weekends.

Related Jobs

Advertising Account Executive (p 51); Economist (p 56); Marketing Officer (p 74); Public Relations Officer (p 75); Research Officer (p 244); Statistician (p 245).

Marketing Officer

Also known as Marketer

Marketing officers promote a company's or client's products or services. This can involve marketing existing products, developing new products to cater for consumer demand, or developing markets for new products or services.

Marketing officers:

- identify and analyse an organisation's strengths and weaknesses, and respond to opportunities and threats in the marketing environment
- set goals for market share and growth
- develop and implement appropriate strategies by selecting, segmenting and targeting markets, and promoting products and services to those markets
- make decisions regarding products, such as choosing labels or packaging
- work on developing new products
- determine an approach to pricing and set prices for products and services
- manage distribution channels such as shops and wholesalers
- make decisions regarding the distribution of products (such as taking orders, warehousing, stock control and transport), manage store image or undertake direct marketing
- develop plans for advertising, sales promotion, public relations, personal selling and sales management
- undertake marketing audits to monitor sales performance.

Marketing involves working with, and gaining the cooperation of, people in specialist areas such as technical experts, production managers, accountants and advertising agents. Marketing officers may have to work in the evenings or on weekends, and may be required to travel for business.

Personal Requirements

- Able to analyse and interpret information
- Creativity
- Very good communication skills
- Good organisational skills
- Able to work independently or as part of a team

Education and Training

To become a marketing officer you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you have a degree in business, communications or commerce with a major in marketing. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Marketing officers may be employed by companies that manufacture or distribute consumer or industrial goods, or companies that provide private business services. They may also work in advertising, promotions, insurance and banking organisations. Increasingly, marketing officers are employed by government departments and enterprises.

Graduates can enter large organisations or manufacturing companies as management trainees. With experience, the career path typically leads from support roles to positions of product, brand and general management. Marketing officers often progress to top management roles later in their careers.

Electronic commerce (e-commerce) is a growing area within marketing, so an understanding of this area is important. Skills in e-commerce may be advantageous when seeking employment. People without specific qualifications may be able to enter marketing through retail, commercial sales, marketing services or by working as assistants to product or marketing managers.

Related Jobs

Advertising Account Executive (p 51); Economist (p 56); Editor (p 72); Events Coordinator (p 263); Market Researcher (p 73); Public Relations Officer (p 75); Social Media Manager (p 77); Sociologist (p 190).

Media Presenter

Also known as Broadcaster , DJ , News Reader , Radio Announcer and Television Presenter

Media presenters deliver a variety of radio, television and live programmes, including all music formats, music and chat programmes, interview and talkback programmes, news bulletins and sports programmes. They may also present rock and classical music concerts that are broadcast live to air, and pre-recorded programmes such as documentary and music specials.

Media presenters:

- announce programs, music and entertainment items
- read commercials, both live and pre-recorded
- read news bulletins
- provide station identification, time, weather and community announcements
- introduce live performances
- conduct interviews and host talkback programs
- make live-action commentary on sporting events, politics, and social and economic matters
- work off-camera in television announcing programs
- host panel shows and live variety shows
- interview personalities at special events, or in studios for live or taped broadcasts
- introduce performers and host special events
- write their own scripts.

Media presenters may be required to work irregular hours, including weekends. On-camera presenters need to be well groomed. Specialist presenters, such as sports and political commentators, should have a solid knowledge of the subject they are presenting.

Personal Requirements

- Clear speaking voice with good command of English
- Broad general knowledge
- Interest in current affairs and/or music
- Technical ability to operate broadcasting equipment
- Able to work under pressure
- Good communication skills
- Willing to work in country areas

Education and Training

You can work as a media presenter without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have qualifications and you may like to consider a VET course. Applicants may be required to attend an audition or an interview. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a media presenter through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Alternatively, you can become a media presenter by studying media, communications or journalism at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Applicants may be required to attend an audition or an interview. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Media presenters work for radio and television stations and advertising production houses. Competition is very strong for any positions offered. There are often more vacancies in country radio stations, which is where inexperienced media presenters usually begin their careers. Successful applicants are often those with knowledge in special areas of interest such as sport, music or drama.

Related Jobs

Actor (p 94); Copywriter (p 71); Journalist (p 72).

Multimedia Developer

$1,346 | Very high skill | Strong

Multimedia developers generate and manipulate graphic images, animations, sound, text and video into consolidated and seamless multimedia applications. Multimedia applications include computer-based interactive training, data presentation and information kiosks, CD-ROMs, entertainment and educational products, and multimedia presentations.

Multimedia developers:

- talk with clients to understand their requirements
- investigate, analyse and recommend appropriate equipment and software to achieve clients' objectives
- prepare flowcharts and storyboards to outline product concepts
- prepare code to produce the multimedia product
- prepare digital graphics, animations, sound, video, photographs and images for editing
- prepare design concepts
- liaise with related graphics, production and engineering experts
- manage the development and implementation of multimedia products.

Personal Requirements

- Aptitude for computing and design
- Creativity and artistic flair
- Ability to both lead and follow instructions
- Strong client focus
- Commitment to understanding and using new technology
- Ability to meet deadlines
- Understanding of colour and form
- Patient and attentive to detail

Education and Training

To become a multimedia developer you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a multimedia developer through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Entry to this occupation may be improved if you have a degree in multimedia or a related area, such as new media design, digital media, communication design or interactive media. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Applicants may also be required to submit a folio of work or attend an interview. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Membership of the Australian Computer Society is available to those who hold, or are working towards, suitable qualifications. There is a range of membership types available, allowing progression through the various levels as a member's career develops.

Employment Opportunities

Multimedia developers may work for a wide range of organisations, including the IT industry, media and publishing companies, web design practices, animation and design studios, educational institutions and advertising agencies. They often work as part of a team, but can work individually or on a freelance basis. With experience and sufficient start-up money, there are opportunities for self-employment.

Multimedia development is a dynamic growth industry that has developed out of a blending of creative production, the arts and the innovative technical presentation techniques provided by a range of IT platforms.

Related Jobs

Artist (p 95); Copywriter (p 71); Film, Stage and Television Director (p 102); Games Developer (p 83); Graphic Designer (p 102); Illustrator (p 103); Industrial Designer (p 104); Journalist (p 72); Web Developer (p 90).

Public Relations Officer

$1,865 | Very high skill | Stable

Public relations officers plan, develop, put into place and evaluate information and communication strategies that present an organisation to the public, clients and other stakeholders. They also promote good information flow within their organisation.

Public relations officers:

- monitor public opinion regarding an organisation or particular issues
- develop and implement communication strategies for an organisation and advise management on communication issues and strategies
- plan public relations programs, including the preparation of cost budgets

- present arguments on behalf of an organisation to government, other organisations and special interest groups
- respond to enquiries from the public, media and other organisations
- arrange interviews with journalists, prepare and distribute media releases, and liaise with and make statements to the media
- write, edit and arrange production of newsletters, in-house magazines, pamphlets and brochures
- assist with preparing organisational documents such as annual reports, corporate profiles and submissions
- write speeches, prepare visual aids and make public presentations
- oversee production of visual, audio and electronic material, including managing websites
- organise special events such as open days, visits, exhibitions and functions
- conduct internal communication courses, workshops and media training
- develop risk assessments and implement crisis management plans to ensure an organisation's reputation is maintained
- plan, develop and manage brand identity
- organise and manage events, exhibitions, conferences and product launches
- procure sponsorship deals.

Public relations officers may have to work in the evenings or on weekends, and may be required to travel for business.

Personal Requirements

- Interested in people
- Good analytical skills
- Good oral and written communication skills
- Able to write concisely
- Good organisational skills
- Interested in current affairs
- Able to work under pressure
- Aptitude for working with computers

Education and Training

To become a public relations officer you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you complete a degree with a major in public relations. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Public relations officers work for a variety of organisations, including large industrial or commercial firms, government organisations, tertiary institutions, industry associations, retailers, financial institutions and not-for-profit organisations. They can also work on a freelance basis or be employed by public relations consultancies that offer a range of public relations services or specialise in particular fields (fashion, for example).

Related Jobs

Advertising Account Executive (p 51); Copywriter (p 71); Editor (p 72); Journalist (p 72); Market Researcher (p 73); Marketing Officer (p 74); Public Servant - Australian Public Service (p 163).

SEO Specialist

A search engine optimisation (SEO) specialist works to improve the search engine ranking results of websites. They often work as a part of a digital marketing team and create strategies that cover the full scope of content and on-site and off-site rankings factors.

SEO specialists:

- streamline website functions to improve search bot crawling efficiency
- reduce image sizes to improve page-loading times
- plan keyword strategies based on research and insights
- write or outsource content that correctly uses the keywords and phrases
- outreach to build a link profile that will assist with rankings results
- monitor rankings for opportunities and make adjustments
- optimise metadata based on best practice guidelines
- stay up-to-date with latest developments and rankings techniques

SEO specialists work in a range of settings, including marketing agencies, as an in-house specialist for businesses across every industry and in a freelance, self-employed capacity.

Personal Requirements

- Good technical knowledge of website construction
- A passion for the internet and internet marketing
- Patience and attention to detail
- Good communication skills
- Self-confidence

Education and Training

You can work as a SEO specialist without formal qualifications. You will probably get some informal training on the job.

Entry into the occupation may be improved if you have qualifications. You can become a SEO specialist by studying advertising, marketing, communications or computing and IT. A SEO specialist combines a number of crossover skills that aren't offered in a vocational program, which means that you will be self-taught to an extent. This makes it important to have an interest and passion for the field. As SEO is a relatively new industry and subject to a lot of change on a month to month basis, specialists are required to stay up-to-date with new developments, as well as conduct their own research.

Employment Opportunities

SEO specialists may be employed by companies that manufacture or distribute consumer or industrial goods, or companies that provide private business services. They may also work in advertising, promotions, insurance and banking organisations. Increasingly, SEO specialists are employed by government departments and enterprises. Their work will encompass a number of search marketing aspects such as search engine optimisation (SEO) and Pay Per Click (PPC), social media, outreach and site analytics.

There is also a lot of scope for freelancing and contract work.

Related Jobs

Digital Marketing Specialist (p 71); Marketing Officer (p 74); Social Media Manager (p 77).

Social Media Manager

Also known as Social Media Coordinator

A social media manager is responsible for maintaining a business' presence and reputation across social networks. They are required to have a strong knowledge of Facebook, Twitter, Instagram, LinkedIn and Snapchat, and to stay across new networks and developments.

Social media managers:

- develop social media campaigns for a range of audience demographics
- research strategies, conduct tests and comparisons
- create content across a range of mediums, including written posts and graphics
- follow trends and devise plans to build new trends around hashtags and viral content.

A social media manager will often be required to work closely with a marketing team that provides coverage across a variety of channels.

Personal Requirements

- Able to analyse and interpret information
- Creativity
- Very good communication skills
- Good organisational skills
- Able to work independently or as part of a team
- A strong interest in social media and the internet

Education and Training

You can work as a social media manager without formal qualifications. You will probably get some informal training on the job. Your employability will be assessed based on your experience and achievements in the social media industry.

Entry to this occupation may be improved if you have a VET qualification. To get into these courses, you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Employment Opportunities

Social media managers often work as part of marketing departments in a range of industries. They can form part of an in-house team, or work in an agency that provides social media services for a range of clients.

Computing & information systems

A qualification in computing and information systems opens a wide variety of options for graduates. You might do hands-on work with hardware and networking, develop systems and programs or you may undertake a creative role in interactive multimedia. Some one of the field's newer niches include cloud computing, artificial intelligence and app development.

Courses and specialisations

Some of the majors you can study include data science, business programming, computer software systems, cybersecurity, database management, games design and development, development, network engineering, software engineering, artificial intelligence and digital technologies.

Some courses have an exclusive focus on one specialisation; others are more closely related to business or engineering, including business information systems or computer engineering degrees.

Where to study

The most important thing is that you choose a course that interests you, whether it is technical, theoretical or business-oriented. Scope out the equipment at different campuses, and look for courses that are accredited by the Australian Computer Society.

Entry difficulty varies depending on the institution and your specialisation of choice. Many are near the bottom of the cut-off scale, but subjects such as maths and physics are often required or recommended for entry.

Five-star universities

Educational experience

ECU	80.8%
UWA	80.4%
SUNSHINE COAST	77.7%
ACU	76.7%
VU	74.2%
TORRENS	73.7%
UniSQ	73.4%
CQUni	73.3%

National average 67.9%

Graduate employment

UNE	90.2%
SYDNEY	86.1%
UNSW	85.3%
DEAKIN	81.5%
ANU	80.3%
QUEENSLAND	80.2%
MONASH	80.1%

National average 72.3%

Learner engagement

ACU	73.3%
CDU	64.3%
CANBERRA	59.7%
UTS	58.2%
FLINDERS	56.7%
VU	54.9%
FEDERATION	53.1%
ECU	52.7%

National average 50%

Learning resources

UWA	93.5%
ECU	91.3%
MURDOCH	90.5%
ACU	86.0%
UniSQ	85.9%
ADELAIDE	84.1%
MACQUARIE	83.8%

National average 77.2%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

15,184
Undergraduate

43,478
Postgraduate

18,376
International undergraduate

What can I do?

Programming
Computer science
System analysis
Project development
Information security
System engineering

Graduate starting salary

$54,200
Undergraduate

$76,600
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

72.3%
Undergraduate

84.1%
Postgraduate

Five-star universities

Median starting salary

ANU	$68,500
SOUTHERN CROSS	$64,500
UWA	$63,300
FEDERATION	$63,100
CANBERRA	$61,500
UTS	$61,200
CURTIN	$60,700

National average
$54,200

Skills development

ACU	86.4%
ECU	84.2%
CQUni	78.7%
FEDERATION	77.2%
CANBERRA	77.0%
UNSW	76.7%
SUNSHINE COAST	76.1%

National average
73.2%

Student support

MURDOCH	83.6%
ECU	81.4%
SUNSHINE COAST	79.8%
ACU	78.6%
UNE	78.0%
UniSQ	76.8%
SOUTHERN CROSS	76.3%
TORRENS	76.2%
FLINDERS	75.5%

National average
71.1%

Teaching quality

ACU	86.7%
ECU	82.5%
UWA	82.4%
UNE	80.6%
MURDOCH	79.8%
UNSW	79.3%
SUNSHINE COAST	78.2%
CANBERRA	77.6%

National average
73.7%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Analyst (Information Technology)

$2,274 Very high skill Strong

Also known as Computer Systems Analyst , Computer Systems Officer and Systems Analyst

Analysts define software requirements and specifications, and guide program design and development.

The analyst's role sits between the initial business analysis stage and the detailed system design, building and programming stages of the systems development process.

Analysts:

- research how IT systems are used and look at ways to improve use and efficiency
- review and develop computer systems, computer languages, data communication processes and user interface devices
- test new IT system designs and fix design problems found
- test new system components
- write reports describing findings, sometimes for publication.

Specialisations

- Applications Systems Analyst
- Computer Tester
- Data Modeller
- Network Analyst
- Operations Systems Analyst

Personal Requirements

- Able to think logically and analytically in a problem-solving environment
- Imaginative, with skills in creative reasoning
- Able to work independently or as part of a team
- Good oral and written communication skills
- Able to accept responsibility
- Willing to continually update personal IT skills and knowledge

Education and Training

To become an analyst you usually have to complete a degree in information technology, information systems or computer science.To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Membership of the Australian Computer Society is available to those who hold, or are working towards, suitable qualifications. There is a range of membership types available, allowing progression through the various levels as a member's career develops.

Employment Opportunities

Analysts work in a range of occupational environments. They may work in IT-specific industries, as well as in other industries requiring IT expertise. They may work on a freelance basis. With experience and sufficient start-up money, there are opportunities for self-employment.

Analyst staff usually start as programmers, although an IT qualification can also be a successful entry point.

Related Jobs

Business Systems Analyst (p 54); Computer Engineer (p 81); Intelligence Analyst (p 156); Management Consultant (p 61); Mathematician (p 242); Sales Representative (p 65).

App Designer

App designers create programs for smartphones, tablets and computers. They work in a range of industries and across a number of platforms, including Apple iOS and macOS, Google Android, and Windows. An app designer may create games, weather apps, social networking tools, maps and navigation programs, and much more.

App designers:

- work with clients to devise app specifications
- code apps using specialist software
- test apps to ensure they work as intended
- write documentation to accompany apps
- update, repair and modify existing apps as required.

Requires spending many hours sitting while using a computer, either in a commercial office or a home office. Makes extensive use of email and other forms of electronic communication.

Personal Requirements

- Interest in coding
- A passion for computers
- Attention to detail
- Strong communication skills
- Patience
- Ability to work to deadlines
- Ingenuity and creativity

Education and Training

To become an app designer, you generally have to study computer systems at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Membership of the Australian Computer Society is available to those who hold, or are working towards, suitable qualifications. There is a range of membership types available, allowing progression through the various levels as a member's career develops. Visit their website for more details.

Employment Opportunities

App designers work in a range of sectors and industries. They may make programs for a single company as an in-house developer, or on a range of programs for an agency. Application developers are highly sought-after and often work on a contractual basis.

Some app designers are self-taught and have learnt via instructional books and online videos. As there are no industry standard certifications for mobile app development, this path relies on building a strong portfolio of work. Many people use the creation of an app to launch an entire business, such as Snapchat and Instagram, while other people work on a project-by-project basis.

Related Jobs

Software Developer (p 88); UI/UX Designer (p 89); Video Game Designer/Developer (p 90).

Big Data Analyst

A big data analyst is someone who specialises in the analysis and presentation of large and complex data sets. This includes the identification, collection and analysis of big data for the purpose of improving decision making and gaining a competitive advantage in the market.

Analysts:

- research how data is used and look at ways to improve use and efficiency
- review and develop collection systems, processes and reporting
- write reports describing findings, sometimes for publication
- translate and extrapolate data
- cross-reference and draw inferences from large, multiple data sets
- present data and findings for a range of audiences.

Requires spending many hours sitting while using a computer, either in a commercial office or a home office. Makes extensive use of email and other forms of electronic communication.

Personal Requirements

- Able to think logically and analytically in a problem-solving environment
- Imaginative, with skills in creative reasoning
- Able to work independently or as part of a team
- Good oral and written communication skills
- Able to accept responsibility
- Willing to continually update skills and knowledge

Education and Training

To become a big data analyst, you usually need a degree in maths, statistics, computer science, information management, finance or economics. These subjects place heavy emphasis on statistical and analytical skills. To get into these courses, you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Big data analysts work in a range of occupational environments. They work across a variety of industries, sometimes on a freelance basis. With experience and sufficient start-up money, there are opportunities for self-employment.

Related Jobs

Analyst (Information Technology) (p 80).

Computer Engineer

Also known as Computer Systems Engineer and Information Technology (IT) Hardware Technician

Computer engineers are involved in the installation, repair and servicing of computers and associated equipment.

Computer engineers:

- devise and undertake a regular service program, including support of operating systems
- analyse problems and develop and implement solutions
- provide input on matters associated with site preparation and installation of large computer systems
- install cables for computer networks
- assist staff with establishing the computer hardware and associated equipment required to run IT systems
- manage projects and supervise staff (in senior computer engineering roles).

Specialisations

- Hardware Design Engineer
- Network/Systems Engineer
- Software Engineer

Personal Requirements

- Able to understand and communicate with a wide variety of people
- Able to work as part of a team
- Logical approach to work
- Self-reliant and able to work independently
- Active interest in learning and maintaining technical skills and knowledge
- Able to investigate, identify and solve problems quickly and efficiently
- Enjoy electronics, computers and electro-mechanical equipment
- Good customer service skills
- Able to make informed decisions about a wide range of complex business and technical issues

Education and Training

To become a computer engineer you usually have to study electronic, computer, computer systems or software engineering at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. A number of universities in Australia offer degrees in these areas. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Membership of the Australian Computer Society is available to those who hold, or are working towards, suitable qualifications. There is a range of membership types available, allowing progression through the various levels as a member's career develops. Graduates may be eligible for membership of Engineers Australia. Visit their websites for more details.

Employment Opportunities

Computer engineers can work in IT-specific industries, which can be large or small, as well as in other industries requiring IT expertise. Computer engineers are often employed by equipment vendors and work closely on client hardware and software installation, and also provide general product support. With experience and sufficient start-up money, there are opportunities for self-employment.

Related Jobs

Analyst (Information Technology) (p 80); Business Systems Analyst (p 54); Computer Systems Auditor (p 82); Information Technology Support Technician (p 85); Intelligence Analyst (p 156).

Computer Systems Auditor

$2,019 Very high skill Very strong

Also known as Electronic Data Processing Auditor and Information Systems Auditor

Computer systems auditors are involved in the design and monitoring of control systems, which ensure the accuracy and security of data. They also review an organisation's computing environment and the use of their computer facilities. Computer systems auditors provide managers with expert opinions about the reliability of results and operations of computer systems. It is essential that computer systems auditors understand both the accounting and information technology implications of computer systems.

Computer systems auditors:

- analyse information processing systems to assess their completeness, accuracy, validity and efficiency
- assess business systems to gauge the accuracy, completeness and timeliness of transaction processing
- review applications systems and business procedures, and assess their effectiveness in achieving desired business objectives
- participate in new system design to ensure an efficient, effective and well-controlled system
- evaluate an organisation's computing environment for effective systems software, systems development and security procedures
- check software and hardware acquisition in terms of its economic and operational efficiency
- check and report on the usage of computing facilities
- talk with data processing management and system users
- write reports and recommendations for improvement in computing facility management.

Personal Requirements

- Interested in business
- Accuracy and attention to detail
- Logical and analytical
- Good communication and interpersonal skills
- Good leadership skills

Education and Training

To become a computer systems auditor you usually have to complete a degree in information technology, accounting, commerce, information systems or business information systems. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Membership of the Australian Computer Society is available to those who hold, or are working towards, suitable qualifications. There is a range of membership types available, allowing progression through the various levels as a member's career develops.

Employment Opportunities

Computer systems auditors work in a range of occupational environments. They can work in IT-specific industries, which can be large or small, as well as in industries requiring their expertise. They may work as part of a team, individually or on a freelance basis. With experience and sufficient start-up money, there are opportunities for self-employment.

Related Jobs

Accountant (p 50); Analyst (Information Technology) (p 80); Business Systems Analyst (p 54); Computer Engineer (p 81); Programmer (Information Technology) (p 86); Systems Designer (Information Technology) (p 88).

Data Analyst

Also known as Data Scientist

Data analysts identify, collect and analyse data for the purpose of improving decision making and gaining a competitive advantage in the market.

Data analysts:

- research how data is used and look at ways to improve use and efficiency
- review and develop collection systems, processes and reporting
- write reports describing findings, sometimes for publication
- translate and extrapolate data
- cross-reference and draw inferences from data sets
- present data and findings for a range of audiences.

Requires spending many hours sitting while using a computer, either in a commercial office or a home office. Makes extensive use of email and other forms of electronic communication.

Specialisations

- Big Data Analyst

Personal Requirements

- Able to think logically and analytically in a problem-solving environment
- Imaginative, with skills in creative reasoning
- Able to work independently or as part of a team
- Good oral and written communications
- Able to accept responsibility
- Willing to continually update skills and knowledge

Education and Training

To become a data analyst, you usually have to complete a degree in maths, statistics, computer science, information management, finance or economics at university. These subjects place heavy emphasis on statistical and analytical skills. To get into these courses, you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

For further details, visit gooduniversitiesguide.com.au.

Employment Opportunities

Data analysts work in a range of occupational environments. They work across a variety of industries, sometimes on a freelance basis. With experience and sufficient start-up money, there are opportunities for self-employment.

Games Developer

Games developers design, create and produce computer or video games. They work in games development teams with artists, programmers, producers and marketing staff. Games developers usually specialise in a particular game platform (PlayStation, Xbox or Nintendo, for example) and a particular aspect of game development, such as programming artificial intelligence or gameplay. Specialisation is common in the industry, although games developers sometimes perform a combination of roles.

Games developers:

- draw up detailed design documentation, including charts and diagrams that outline the various concepts and components involved
- modify and document the program code to correct errors
- test the game and make amendments to enhance its capabilities
- prepare digital graphics, animations, sound, video, photographs and images for editing
- combine structural, mechanical and artistic elements into the game's environment, such as buildings, vehicles and decorative finishes.

Personal Requirements

- Aptitude for computing
- Creative and artistic flair
- Commitment to understanding and using new technology
- Good communication skills
- Aptitude for drawing
- Understanding of colour and form
- Able to work as part of a team

Education and Training

To become a games developer you usually have to complete a VET qualification in digital and interactive games or digital media technologies. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a games developer through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Entry to this occupation may be improved if you have a degree with a major in games design, games development or games programming, digital media or multimedia. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Applicants may also be required to submit a folio of work or attend an interview. A number of institutions in Australia offer degrees in these areas. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Membership of the Australian Computer Society is available to those who hold, or are working towards, suitable qualifications. There is a range of membership types available, allowing progression through the various levels as a member's career develops.

Employment Opportunities

Games developers often work as part of a team, but can work individually or on a freelance basis. With experience and sufficient start-up money, there are opportunities for self-employment.

Games development is a relatively new and dynamic growth industry that has developed out of a blending of creative and technical production.

Competition for jobs is intense and interstate and/or overseas experience is often needed to improve employment opportunities.

Related Jobs

Analyst (Information Technology) (p 80); Artist (p 95); Graphic Designer (p 102); Sound Technician (p 111); Systems Designer (Information Technology) (p 88).

Geographic Information Systems Officer

Also known as Land Information Systems Officer , Spatial Information Systems Officer , Spatial Information Systems Technician and Surveying Technologist

Geographic information systems officers design, develop and customise geographic information systems and provide technical and analytical support to address issues such as environmental management, exploration and mining, land ownership and titles, urban and regional planning, utilities and asset management, and demographic marketing.

Geographic information systems officers:

- manipulate and analyse data such as geographic and land information source maps and survey data
- link spatial data for land administration purposes
- develop and customise computer programs used in geographic information systems (GIS)
- prepare, edit and revise cartographic output for the preparation, reproduction and publication of maps.

The cartographic and analytical output produced by geographic information systems officers is used to aid in the efficient management and use of land assets within Australia.

Personal Requirements

- Able to analyse and solve problems
- Good communication and computing skills
- Interested in the environment
- Able to produce detailed and accurate work
- Able to work as part of a team

Education and Training

To become a geographic information systems officer you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you have a degree with a major in geographical, spatial or geospatial science; geography; geomatics or surveying. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry, physics and biology are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Graduates and students may be eligible for membership of the Surveying and Spatial Sciences Institute and the Mapping Sciences Institute, Australia.

Employment Opportunities

The major employers of geographic information systems officers are federal, state, territory and local government organisations; statutory authorities; and private companies involved in land use, planning and management. There is a demand for specialist skills, ranging from systems development (designing and building geographic databases, spatial management and analysis tools, and web delivery systems) to the application of geographic information systems to provide specialist solutions in environmental, business and development activities.

Related Jobs

Forester (p 34); Hydrologist (p 36); Intelligence Analyst (p 156); Natural Resource Manager (p 37); Surveyor (p 46); Urban and Regional Planner (p 46).

Information Security Analyst

Information security analysts plan, upgrade and monitor security measures to protect computer networks, safeguard digital infrastructure and respond to viruses.

Information security analysts:

- encrypt data transmissions and implement firewalls to shield confidential information
- develop methods to protect files from unauthorised access
- monitor use of data and regulate access to information
- review computer security violation procedures

Requires spending many hours sitting while using a computer, either in a commercial office or a home office. Makes extensive use of email and other forms of electronic communication.

Personal Requirements

- Interest in coding
- Passion for computers
- Ability to concentrate for extended periods of time
- Analytical and methodical
- Able to work independently
- Excellent computer skills
- Good customer service skills
- Able to work as part of a team
- Ability to solve problems and make informed decisions

Education and Training

Information security analysts usually have to obtain a degree in computer systems or software engineering. To get into these courses, you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Information security analysts are usually employed by IT-specific organisations or as part of the IT department within a company. With suitable experience, freelancing is also an option.

Related Jobs

Information Technology Support Technician (p 85).

Information Technology Administrator

Information technology (IT) administrators manage the day-to-day operations of IT systems to ensure that the systems run effectively.

IT administrators work with IT managers to make sure that the computer system provides sufficient computing power to deliver the desired level of business performance.

IT administrators:

- talk with managerial, administrative and technical staff to determine information needs, data flows and systems definitions
- establish and control systems' access and security
- coordinate protocols for operation within multi-user IT networks that provide voice, data and text transmission
- check systems in order to optimise performance and initiate recovery action after system failures
- implement regular housekeeping procedures, including data backup
- manage the distribution and retention of data on various storage devices
- coordinate system updates and replacement of outdated versions
- maintain data dictionaries
- provide day-to-day advice to users on data structures and terminology
- provide assistance with testing new equipment and systems
- prepare technical reports on the operation of systems
- prepare systems' cost estimates and cost-benefit analyses
- coordinate the work of support staff
- provide training in systems use and access.

Specialisations

- Database Administrator
- Network Administrator
- Systems Administrator

Personal Requirements

- Aptitude for technical activities
- Good communication skills
- Able to quickly understand complex problems and devise effective solutions
- Willing to maintain and update own knowledge of IT content
- Able to work independently
- Able to direct and oversee the work of others

Education and Training

To become an IT administrator you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become an IT administrator by studying information technology or computing at university with a major in systems administration, network engineering, network security or software development. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite

subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

IT administrators can work in IT-specific industries and other industries requiring IT expertise. With experience, there are opportunities for self-employment or starting your own business.

Related Jobs

Business Systems Analyst (p 54); Computer Engineer (p 81); Intelligence Analyst (p 156).

Information Technology Support Technician

Information technology (IT) support technicians provide technical advice and support to help people use computer software and hardware effectively.

IT support technicians:

- identify the hardware and software needed to provide solutions to problems
- assist with the customisation and adaptation of existing programs to meet users' requirements
- provide telephone, face-to-face and online support to customers
- download and install appropriate software
- connect users to networks and provide initial training in facilities and applications
- talk with vendors and programmers
- provide information relating to customers' hardware and software purchasing decisions
- ensure users can use the equipment by providing personal tuition and self-help instructions
- undertake housekeeping and reporting functions for the area of responsibility.

Specialisations

- Help Desk Operator

Personal Requirements

- Strong client focus and genuine desire to assist
- Analytical skills
- Persistence
- Good communication skills
- Able to work as part of a team
- Patient and tolerant
- Aptitude for technical activities
- Methodical and disciplined approach to problem-solving

Education and Training

To become an IT support technician you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become an IT support technician through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Membership of the Australian Computer Society is available to those who hold, or are working towards, suitable qualifications. There is a range of membership types available, allowing progression through the various levels as a member's career develops.

Employment Opportunities

IT support technicians work in a range of occupational environments. They may work in IT-specific industries or in any industry requiring IT expertise. They may work as a member of a team or individually. With experience, and sometimes further training, there are opportunities for self-employment or promotion to supervisory positions.

Related Jobs

Computer Engineer (p 81); Programmer (Information Technology) (p 86); Sales Representative (p 65).

Machine Learning Engineer

Machine learning engineers play a crucial role in developing and implementing machine learning models and algorithms. They are responsible for collecting and preprocessing data, selecting appropriate algorithms and optimising model performance. Overall, machine learning engineers contribute to advancements in artificial intelligence and drive innovation in various industries.

Machine learning engineers:

- Develop and implement machine learning models and algorithms
- Prepare and preprocess data for machine learning tasks
- Evaluate and optimise model performance
- Collaborate with data scientists and software engineers to integrate models into applications
- Ensure data privacy and ethical considerations in machine learning projects
- Stay up to date with the latest advancements in machine learning techniques

Machine learning engineers typically work in office environments, collaborating with data scientists, software engineers and domain experts to integrate machine learning models into applications. They balance team collaboration with individual work and adapt to changing project requirements and timelines.

Specialisations

- Natural Language Processing (NLP)
- Computer vision
- Reinforcement learning
- Deep learning
- Big data

Personal requirements

- Strong analytical and problem-solving skills to develop effective machine learning models
- Proficiency in programming languages such as Python or R
- Excellent mathematical and statistical knowledge
- Curiosity and a passion for continuous learning
- Good communication skills to collaborate with cross-functional teams
- Attention to detail and the ability to work with large datasets

Education and training

To become a machine learning engineer, you'd typically require a bachelor or masters degree in computer science, data science or a related field. You should also have a solid understanding of machine learning algorithms, statistical modelling and data analysis; be proficient in programming languages such as Python, R or Java; and have knowledge of frameworks and libraries such as TensorFlow, PyTorch or scikit-learn. Ongoing professional development can be pursued through courses, workshops and certifications.

Employment opportunities

Machine learning engineers have excellent employment opportunities in Australia. Key aspects include increasing demand across industries, including finance, healthcare, retail and technology. There are also opportunities in research institutions, startups and large corporations. There is potential for career advancement and growth as machine learning continues to be a critical field in the digital age.

Platform Engineer

$1,586

Very high skill

Strong

Platform engineering is a critical role in the tech industry that involves designing, building and maintaining the infrastructure that powers modern digital services. A platform engineer is responsible for creating and supporting the underlying systems that allow software applications to run smoothly and efficiently. In Australia, the demand for platform engineers is growing as more and more businesses embrace digital transformation.

Platform engineers:

- design and developing infrastructure solutions that support the delivery of digital services
- configure and deploy infrastructure using automated tools
- monitor systems and applications to ensure reliability and availability
- identify and resolve technical issues
- develop and implement security and compliance measures
- Collaborate with cross-functional teams to ensure seamless integration of software applications with infrastructure systems.

Platform engineers work in fast-paced, dynamic environments. They often work long hours and may be required to be on call outside of regular business hours. They may work in an office or remote setting, depending on the employer's policies.

Specialisations

- Cloud infrastructure management
- DevOps engineering
- Site reliability engineering
- Database engineering
- Security engineering

Personal requirements

- Strong analytical and problem-solving skills
- Excellent communication and interpersonal skills
- Attention to detail
- Ability to work in a team environment
- Good time-management skills
- Strong knowledge of programming languages, operating systems and networking principles

Education and training

To pursue a career as a platform engineer, the following education and training are typically required a bachelor's degree in computer science, software engineering or a related field; relevant certifications such as AWS Certified DevOps Engineer or Google Cloud Platform Engineer; ongoing professional development to keep up with emerging technologies and trends in the industry.

Employment Opportunities

There is a growing demand for platform engineers in Australia, with many businesses and organisations investing in digital transformation initiatives. Opportunities for platform engineers can be found in a range of industries, including finance, healthcare, government and technology. Platform engineers can work in a variety of settings, including large corporations, startups and government agencies.

Programmer (Information Technology)

$2,003

Very high skill

Very strong

Also known as Computer Programmer

Programmers (IT) write, test and maintain computer programmes to ensure that the computer application meets the needs of the users of the computer system.

Programmers:

- assist systems analysts and designers in researching and documenting computer users' requirements
- analyse objectives and problems specified by analysts and designers
- translate the solutions provided by systems designers into detailed program specifications
- prepare documentation for other programmers, users of the system and other support services workers
- undertake program design activities including definition of data and error message arrangements
- supervise and report on the work of junior programmers
- modify and document program code to correct errors or to enhance a program's capabilities
- test the programs and make amendments
- prepare reports on the status, operation and maintenance of system software for use by computer equipment suppliers, systems designers, other programmers and computer operators.

Personal Requirements

- Aptitude for technical activities
- Logical approach to the solution of problems
- Able to work independently or as part of a team
- Good communication skills
- Willing to update knowledge as technology changes

Education and Training

To become a programmer you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a programmer by studying information technology or computer science at university with a major in programming, software development or games development. To get into these courses, you usually need to gain your Senior

Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Membership of the Australian Computer Society is available to those who hold or are working towards suitable qualifications. There is a range of membership types available, allowing progression through the various levels as a member's career develops.

Employment Opportunities

Programmers may work in small IT companies or in larger organisations. There are some opportunities to work on a freelance basis. Typically, people working as programmers advance into designer and analyst roles after some years of experience. In some smaller organisations, all three roles may be carried out by a single individual.

Related Jobs

Analyst (Information Technology) (p 80); Computer Systems Auditor (p 82); Electronics Engineer (p 140); Games Developer (p 83); Information Technology Support Technician (p 85); Intelligence Analyst (p 156); Mathematician (p 242); Sales Representative (p 65); Web Developer (p 90).

Robotics Engineer

Also known as Robotics Technician

Robotics engineers design, build, test and repair robots and robotic systems.

Robotics engineers:

- Build, configure and troubleshoot robots and robotics systems
- Research and design processes for operating robotic systems
- Develop cost proposals and quality control reports
- Develop designs and applications

Workplaces range from laboratories and processing plants to engineering design offices.

Personal Requirements

- Knowledge of mathematics and physics
- Enjoy technical work
- Able to work independently or as part of a team
- Able to think creatively and problem solve

Education and Training

To become a robotics engineer, you usually need a degree in engineering, with a major in robotics or mechatronics. To get into these courses, you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Robotics engineers are employed in firms where it is necessary to design and maintain automatic equipment. This includes a variety of industries, such as manufacturing, mining, aviation, robotics, defence and transport.

Related Jobs

Mechatronic Engineer (p 144).

Site Reliability Engineer

$3,092 | Very high skill | Strong

Site reliability engineering focuses on ensuring the reliability, scalability and efficiency of complex computer systems.

Site reliability engineers:

- ensure the reliability and performance of complex computer systems
- bridge the gap between software development and operations
- design, develop and implement strategies for system automation
- collaborate with software engineers and system administrators to optimise system performance
- monitor and analyse system metrics to identify areas for improvement
- develop and implement incident response and disaster recovery plans
- conduct performance testing and capacity planning
- troubleshoot system issues and providing timely resolutions
- conduct root cause analysis for system failures.

Site reliability engineers typically work in office environments. They may be required to work outside of regular business hours to handle system emergencies or perform scheduled maintenance. Remote work options may be available depending on the employer and project requirements.

Specialisations

- Cloud infrastructure management
- Network reliability engineering
- Database reliability engineering
- Security and compliance
- Performance optimisation

Personal requirements

- Analytical skills
- Problem-solving skills
- Attention to detail
- Communication skills
- Education and training

Education and Training

A bachelor degree in computer science, engineering or a related field is usually required to become a site reliability engineer. A postgraduate degree in a relevant field may also be advantageous. Additionally, experience working with computer systems, software development and IT infrastructure is essential.

To enhance their technical skills, site reliability engineers can also undertake industry certifications, such as those offered by Amazon Web Services, Microsoft Azure and Google Cloud. These certifications demonstrate proficiency in cloud technologies, containerisation, and automation tools used in site reliability engineering roles.

Additional information

According to Payscale, the average salary for a site reliability engineer in Australia is approximately $117,000 per year, although this can vary depending on the level of experience, location and industry.

Employment opportunities

There is an increasing reliance on complex IT systems by businesses of all sizes. Many industries, including finance, healthcare and technology, require site reliability engineers to maintain and optimise their systems. The most significant employers of site reliability engineers in Australia include financial institutions, software development companies and telecommunication companies.

Site reliability engineers may also work as consultants or contractors, providing their expertise to companies on a project-by-project basis. Many site reliability engineers also work remotely, providing their services to companies in different states or countries.

Software Developer

A software developer designs, tests and programs computer software. They are traditionally a member of the IT department within an organisation and, depending on the size of the company, may work individually or as part of a team. They are responsible for writing, monitoring and modifying software to ensure that computer systems are functioning correctly.

Software developers:

- modify software to fix errors and upgrade interfaces
- develop system testing or validation protocols
- liaise with clients and colleagues on system design and maintenance issues
- analyse data in order to recommend, plan and implement a new system or adjust a current system
- program software with relevant documentation.

A software developer is ordinarily an in-house employee, often at an IT-specific company or as part of the IT team within a business. They can also be self-employed via a start-up, depending on sufficient funding.

Personal Requirements

- Analytical and methodical
- Good concentration
- Excellent computer skills
- Able to work independently
- Able to work as part of a team
- Good customer service skills
- Ability to solve problems and make informed decisions
- Interested in coding
- Passion for computers

Education and Training

A software developer will normally require a degree or diploma in computer systems or software engineering. The majority of these courses would usually entail gaining your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics is normally needed. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Software developers work in a range of sectors and industries. They may make programs for a single company as an in-house developer, or on a range of programs for an agency. Developers are highly sought after and often work on a contractual basis. Some software developers are self-taught and have learnt via instructional books and online videos. As there are no industry standard certifications for web developers, this path relies on building a strong portfolio of work.

Related Jobs

Computer Engineer (p 81); Computer Systems Auditor (p 82); UI/UX Designer (p 89).

Systems Designer (Information Technology)

Also known as Systems Engineer , Solutions Architect and Information Technology Strategist

Systems designers (IT) create detailed design documentation for the development and integration of computer systems to meet the needs of businesses.

Systems designers (IT):

- work with analysts on the feasibility of a conceptual design by taking technical specifications prepared by the analyst and designing system components to meet the set requirements
- draw up detailed design documentation including charts and diagrams that indicate the various components involved
- prepare instructions for programmer implementation
- talk with other team members (analysts and programmers) to ensure functionality according to systems specifications, and develop solutions as problems or issues arise
- design monitoring and performance measurement processes.

Personal Requirements

- Able to understand and solve complex problems
- Logical and analytical approach to solving problems
- Good communication skills
- Able to work independently or as part of a team
- Able to direct the work of others
- Willing to actively maintain personal skills and knowledge of IT

Education and Training

To become a systems designer you usually need to study information technology, computer science or computer engineering at university, specialising in computing systems, and have substantial systems engineering industry experience. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Membership of the Australian Computer Society is available to those who hold, or are working towards, suitable qualifications. There is a range of membership types available, allowing progression through the various levels as a member's career develops.

Employment Opportunities

Systems designers work in a range of occupational environments. They may work in IT-specific industries, which can be large or small, as well as other industries requiring their expertise. With experience and sufficient start-up money, there are opportunities for self-employment. In some organisations, the systems design role may be combined with the analyst and/or programmer role. Career progression is generally from programmer/engineer to analyst, to designer.

Related Jobs

Analyst (Information Technology) (p 80); Business Systems Analyst (p 54); Computer Engineer (p 81); Games Developer (p 83); Information Technology Administrator (p 84); Intelligence Analyst (p 156); Programmer (Information Technology) (p 86); Web Developer (p 90).

Technical Program Manager

A technical program manager is a professional responsible for managing and overseeing the execution of complex technical projects within an organisation. They serve as a bridge between technical teams and business stakeholders, ensuring alignment and successful project delivery.

Technical program managers:

- define project goals, scope and deliverables in collaboration with stakeholders
- develop project plans, including timelines, milestones and resource allocation
- manage project budgets and ensure efficient resource utilisation
- coordinate and lead cross-functional teams to achieve project objectives
- monitor project progress, identify potential risks and issues and implement appropriate mitigation strategies
- provide regular project status updates to stakeholders and senior management
- conduct project evaluations and post-mortem reviews to identify areas for improvement.

Technical program managers typically work in office environments. The role involves a combination of working independently and collaborating with cross-functional teams. Depending on the project requirements, there may be a need for occasional travel or remote work options.

Specialisations

- Software development projects
- Infrastructure and cloud migration projects
- Data analytics and business intelligence projects
- Cybersecurity and information technology projects

Personal requirements

- Strong leadership and project management skills
- Excellent communication and interpersonal skills
- Able to work well in a team and demonstrate the ability to lead and motivate others
- An analytical mindset with problem-solving abilities
- Attention to detail
- Organisational skills

Education and training

To become a technical program manager, a bachelor's degree in computer science, engineering or a related field is typically required. Additional qualifications such as project management certifications (e.g., PMP or Prince2) are highly valued. It is also beneficial to obtain certifications in Agile methodologies, such as Certified Scrum Master, to effectively manage projects in dynamic and fast-paced environments.

Employment opportunities

Technical program managers are in demand across various industries in Australia, including technology, finance, telecommunications and government sectors. Employment opportunities exist in large corporations, technology companies, consulting firms and government agencies. Job prospects are favourable for qualified individuals with relevant experience and a strong track record in delivering successful technical projects.

UI/UX Designer

A UI/UX designer is responsible for developing the look and feel of websites. They focus on the user's journey and consider how to make it as smooth and productive as possible. Their role is important in the world of web design and can influence sites' performance in a number of ways, including conversion, time on site (TOS) statistics and shareability.

A UI/UX designer:

- design, build and maintain websites by scripting languages, applying content creation and management tools, and using digital media
- write, design or edit copy for websites
- implement website updates
- discuss ideas with clients to get a clear understanding of their requirements
- decide on the design aspects of websites, including the use of graphics, links and forms
- manage image and copyright issues.

Requires spending many hours sitting while using a computer, either in a commercial office or a home office.

Personal Requirements

- Able to concentrate for long periods of time
- Interested in coding
- Able to work as part of a team
- Passion for computers and understanding new technology
- Strong attention to detail
- Able to work to deadlines

Education and Training

While you don't need formal training to become a UI/UX designer, it can be advantageous to study computer systems at university. To get into these courses, you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Membership of the Australian Computer Society is available to those who hold, or are working towards, suitable qualifications. There is a range of membership types available, allowing progression through the various levels as a member's career develops.

Employment Opportunities

UX/UI designers typically work in IT-specific industries and IT departments within organisations. With appropriate experience, there are opportunities for self-employment.

Related Jobs

App Designer (p 80); Software Developer (p 88); Video Game Designer/Developer (p 90).

Video Game Designer/ Developer

A video game designer/developer designs the core elements of video games, including role mechanics, story-lines and characters.

Video game designer/developers:

- adjust gameplay experience to meet commercial and critical objectives
- offer feedback to designers in order to improve gameplay quality
- develop in-game features such as storylines and character history
- discuss design aspects with development teams
- formulate missions and challenges to be encountered in gameplay

Being a video game designer/developer requires spending many hours sitting while using a computer, either in a commercial office or a home office. They make extensive use of email and other forms of electronic communication. With experience, freelancing is also an option.

Personal Requirements

- Good attention to detail
- Creative
- Ability to concentrate for long periods of time
- Interested in coding
- Passion for computers and video games

Education and Training

A video game designer/developer will normally require a degree or diploma in computer systems or software engineering. The majority of these courses would usually entail gaining your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics is normally needed. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Membership of the Australian Computer Society is available to those who hold, or are working towards, suitable qualifications. There is a range of membership types available, allowing progression through the various levels as a member's career develops.

Employment Opportunities

Video game designers/developers work in a range of sectors and industries. They may make programs for a single company as an in-house developer, or on a range of programs for an agency. Developers are highly sought after and often work on a contractual basis. Some software developers are self-taught and have learnt via instructional books and online videos. As there are no industry standard certifications for web developers. this path relies on building a strong portfolio of work.

Related Jobs

App Designer (p 80); Games Developer (p 83); UI/UX Designer (p 89).

Web Developer

Web developers design, create, produce and maintain websites using relevant software packages.

Web developers:

- talk with clients and discuss ideas to get a clear understanding of their requirements
- develop website content
- manage the image and copyrights of the company on the internet
- decide on the design aspects of the website, including the use of graphics, links and forms
- ensure text and graphic elements mesh together as a cohesive, eye-catching work
- develop custom programs to extend the functionality of websites
- talk with writers, designers, system administrators and other IT staff to ensure the website will fulfil its purpose
- maintain or update the website once it is completed by adding new content, illustrations or features
- coordinate other people, such as designers and writers, to help maintain the website.

Web developers are often required to travel locally, nationally and internationally to meet clients and other people working on particular projects, such as designers and systems specialists. Working conditions can be stressful at times, especially when deadlines need to be met.

Personal Requirements

- Creative
- Aptitude for technical tasks
- Good communication skills
- Able to work as part of a team
- Committed to understanding new technology and upgrading skills

Education and Training

You can work as a web developer without formal qualifications. You will probably get some informal training on the job. Skills may be developed through practice and experience. Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. As subjects and prerequisites

can vary between institutions, you should contact your chosen institution for further information.

You can also become a web developer through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Alternatively, you can become a web developer by completing a degree in information technology or communication design with a major in web development, web design or multimedia. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Applicants may also be required to submit a folio of work or attend an interview. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Membership of the Australian Computer Society is available to those who hold, or are working towards, suitable qualifications. There is a range of membership types available, allowing progression through the various levels as a member's career develops.

Employment Opportunities

Web developers work in IT-specific industries and other industries requiring IT expertise. With experience, there are opportunities for self-employment.

Related Jobs

Editor (p 72); Games Developer (p 83); Graphic Designer (p 102); Sales Representative (p 65).

Creative arts

Where the arts used to be confined to museums and galleries, the 'creative economy' now drives all types of business and organisations. Thanks to growth in the digital space, more artists now work in corporations as well as in studios, with a significant number working outside specialist creative organisations.

Courses and specialisations

Some of the majors you can study in this field include acting, animation, costume design, dance, fashion design, graphic design, multimedia, music, performing arts, theatre and visual arts.

Specialising in an area like graphic design gives you the chance to work in businesses or private firms, as well as on a freelance basis. Completing a double degree (pairing the arts with a profession such as teaching, for example) can also boost your prospects.

Where to study

Some universities have inherited or incorporated specialist colleges with long histories and distinguished teachers. There are also many private education providers, some of which are very prestigious.

The experience of teaching staff and opportunities to exhibit and perform are vital. Courses often include activities such as performances and studio and gallery visits — some even have their own resident artists and galleries.

Entry into some courses is highly competitive, and many require auditions or portfolios. Often, applications go directly to the institution rather than through tertiary admissions centres.

Five-star universities

Educational experience

UWA	96.6%
CQUni	90.1%
UNE	87.8%
SUNSHINE COAST	86.7%
TORRENS	84.6%
VU	84.1%
CURTIN	83.0%
ADELAIDE	82.6%

National average
76.6%

Graduate employment

UNE	66.7%
CQUni	61.5%
TORRENS	60.5%
QUT	58.8%
UNSW	58.1%
MONASH	57.9%
DEAKIN	57.6%
SWINBURNE	57.6%

National average
50.5%

Learner engagement

UWA	89.7%
VU	81.8%
ADELAIDE	74.2%
FEDERATION	73.8%
ECU	72.8%
AVONDALE	71.9%
MELBOURNE	71.2%

National average
62.4%

Learning resources

UWA	94.6%
DEAKIN	92.8%
MACQUARIE	90.4%
WOLLONGONG	89.6%
SUNSHINE COAST	86.7%
QUT	86.4%
UniSA	86.0%
CURTIN	85.7%

National average
80.5%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

15,564
Undergraduate

6,524
Postgraduate

5,059
International undergraduate

What can I do?

Graphic design
Performing arts
Fashion design
Film production
Painting

Graduate starting salary

$33,800
Undergraduate

$39,400
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

50.5%
Undergraduate

64.6%
Postgraduate

Five-star universities

Median starting salary

AVONDALE	$64,400
CDU	$56,400
UTS	$39,600
SWINBURNE	$38,400
CANBERRA	$38,300
VU	$38,200
UNE	$37,800
UNSW	$37,800

National average
$33,800

Skills development

UWA	96.5%
AVONDALE	87.5%
DEAKIN	87.4%
LA TROBE	85.7%
ADELAIDE	84.8%
CQUni	84.0%
WESTERN SYDNEY	84.0%
WOLLONGONG	84.0%

National average
80.8%

Student support

UWA	93.9%
VU	90.6%
DEAKIN	84.1%
CQUni	83.1%
AVONDALE	82.8%
CSU	80.0%
WESTERN SYDNEY	80.0%
TORRENS	79.8%
FLINDERS	79.7%

National average
74.6%

Teaching quality

UWA	98.3%
CQUni	97.5%
AVONDALE	96.9%
UNE	92.7%
DEAKIN	90.9%
LA TROBE	90.0%
SUNSHINE COAST	89.0%
QUEENSLAND	88.9%

National average
84.2%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Actor

Also known as Performer , Film Star , Movie Star and Entertainer

Actors portray roles in live and recorded or filmed productions. An actor may perform in theatre, opera or variety, film, radio, television, commercials and online material.

Actors:

- study and memorise scripts, learn parts and interpret roles through speech, gesture and performance skills
- attend auditions and perform prepared or improvised pieces
- rehearse lines, cues and movements
- undertake extensive research for roles and productions
- act the part of a film, television, stage or radio character in front of live audiences, cameras or microphones
- sing and dance when a script or role requires it.

Most productions require long rehearsal schedules and many hours of memorising lines outside the rehearsal periods.

Specialisations

- Voice-over artist

Personal Requirements

- Determination and commitment
- Self-confidence
- Good memory
- Patience and stamina
- Clear speaking skills
- Ability to cope with changing situations

Education and Training

You can work as an actor without a qualification, although it is advisable to undertake some formal training to improve your chances of gaining employment. Acceptance into formal courses is linked to your acting ability and interest, demonstrated by prior experience and/or an audition piece.

You may like to consider a VET qualification in acting, performing arts, music theatre or theatre and screen performance.

You can also become an actor by completing a degree in acting, drama, performing arts, music theatre or theatre studies. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Competition for places is strong, and an audition, practical test or interview may be required. Institutions have different prerequisites and some have flexible entry requirements.

Additional Information

The National Institute of Dramatic Art (NIDA) and the Western Australian Academy of Performing Arts (WAAPA) conduct auditions each November in most states and territories. Contact NIDA (www.nida.edu.au) or WAAPA (www.waapa.ecu.edu.au) for further details. The Victorian College of the Arts (VCA) usually holds auditions in November and early December. Contact VCA (http://vca.unimelb.edu.au) for more information. Perform Australia (www.perform.edu.au) has intakes in February and July with auditions taking place in the months prior to course commencement.

Employment Opportunities

To be successful as an actor, you will need to gain recognition from industry contacts, such as casting consultants and theatre, film, television and radio producers. Most employment for actors in Australia is provided by theatre companies, firms producing television programs, the Australian Broadcasting Corporation, advertising agencies making television and radio commercials, and film companies. Most actors move from one medium or type of work to another as opportunities arise.

There may be times when work is easier to find, or when an actor has a part in a long-term production. At other times, work may be scarce and actors may be out of work for some time. As a result, they may not be able to count on a regular income from acting. Most professional actors hire a talent agent or management agency to represent them and help find them employment. Actors often have to support themselves between assignments with alternative employment. They sometimes form groups and produce their own work.

Factors that affect demand for an actor's services include the number and type of films, television programs and stage shows being produced; the level of government, private and corporate funding; and the quality of the individual's work and reputation within the industry.

Related Jobs

Arts Administrator (p 95); Dancer (p 98); Film, Stage and Television Director (p 102); Model (p 107); Musician (p 108); Stage Manager (p 111); Teacher - Music (p 127).

Art Therapist

Art therapists work with a client or a group of clients to help them address emotional and psychological issues through creative activities such as drawing, painting, sculpting and collage.

Art therapists:

- conduct therapeutic interviews and provide psychotherapy and counselling
- provide assessments to identify the source of problems and determine appropriate treatment
- provide follow-up services to groups and individuals for support and evaluation purposes
- build relationships with clients to support them in understanding their emotions and behaviours
- assess individuals and groups in order to identify their abilities and needs
- develop activities that may use painting, sculpting, printing and/or drawing to address a patient's needs and concerns in a safe, nurturing environment
- maintain appropriate records of patient progress
- provide consultation and information about patient progress
- assess, monitor and evaluate the effectiveness of artistic and therapeutic interactions.

Personal Requirements

- Interested in people and human behaviour
- Good problem-solving skills
- An inquisitive mind
- Able to maintain confidentiality
- Patient and perceptive
- Good oral and written communication skills

Education and Training

To become an art therapist you usually have to study art, counselling, psychology, nursing, social science or a related field at university, followed by a postgraduate qualification in art therapy and 750 hours of supervised field experience on a clinical placement. To get into the degree courses you usually

need to gain your Senior Secondary Certificate of Education. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for further information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.

In order to practise, art therapists must be registered with ANZATA. To register and become a full member of ANZATA, applicants are required to complete a recognised masters degree in art therapy with a component of 750 supervised clinical hours placement within the mental health area. Once registered with the association, members have reciprocal rights with overseas art therapy associations. Student membership is also available. For more information, visit their website.

Employment Opportunities

Art therapists work in any area where people require assistance with achieving a better quality of mental health. This includes psychiatric wards, prisons, rehabilitation centres, and drug and alcohol units. Art therapists are employed in non-government organisations and community-based organisations such as welfare centres, aged-care facilities and schools. They are also employed in private practice and in private health clinics.

Related Jobs

Artist (p 95); Counsellor (p 170); Music Therapist (p 108); Rehabilitation Counsellor (p 228); Social Worker (p 250); Teacher - Early Childhood (p 125); Teacher - Special Education (p 130); Youth Worker (p 251).

Artist

Also known as Art Practitioner and Visual Artist

Artists conceive and create visual representations to investigate, respond to or communicate an impression or idea.

An artist may be concerned with the production of two-dimensional or three-dimensional forms, employing a number of methods such as painting, drawing, printmaking, photography, sculpture and ceramics to realise their ideas. They may also use film, digital technology and performance techniques and forms.:

Artists may concentrate on a specific area of work or may use a combination of techniques. They generally work in studios and may share the space with other artists.

Specialisations

- Painter (Fine/Visual Arts)
- Performance/Live Art Artist
- Printmaker
- Sculptor/Installation Artist

Personal Requirements

- Artistic ability
- Good hand-eye coordination
- Creative and the ability to conceptualise ideas
- Self-discipline
- Promotional skills

Education and Training

You can work as an artist without formal qualifications.

Entry to this occupation may be improved if you have qualifications in relevant art-related disciplines, which may enhance your skills. You may like to consider a VET qualification in an art-related area, such as visual arts or design. Applicants may be required to attend an interview and/or submit a folio of work. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become an artist by studying visual arts, creative arts, fine arts or design at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and an arts or design subject are normally required. Applicants may also be required to attend an interview and/or submit a folio of work. A high level of talent is required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Artists often establish a studio or cooperative base and take part in group or individual exhibitions. They may be represented by galleries that promote and sell their work. Their work may be purchased by private collectors or held in public collections within cultural institutions.

Other opportunities include public art commissions, residencies, research and grant opportunities, as well as work within the creative industries.

Other possible employers include educational institutions, television and theatre companies, design and printing firms, hospitals and museums. Artists may be commissioned to create a specific piece of work for an individual or organisation.

Job opportunities are extremely competitive and depend on the demand for artistic services, the quality of the artist's work and their reputation within the arts industry. Most artists take on other jobs for financial support.

Related Jobs

Dancer (p 98); Graphic Designer (p 102); Illustrator (p 103); Industrial Designer (p 104); Interior Designer (p 105); Multimedia Developer (p 75); Museum Curator (p 189); Set Designer (p 110); Teacher - Art (p 125); Textile Designer (p 112).

Arts Administrator

Also known as Arts and Cultural Planner and Cultural Development Officer

Arts administrators manage artistic and cultural venues such as theatres and art galleries.

Arts administrators:

- seek sponsorship and funding from federal, state, territory and local governments as well as community and industry organisations
- prepare and submit funding applications
- negotiate with artists and performers regarding contracts
- coordinate arts programs
- coordinate sound and lighting, stage management and security, box office sales, distribution and sale of publications, public relations and catering
- take part in the commissioning and purchasing of works of art
- organise and promote exhibitions and events

- help to develop and implement the organisation's strategic plans and marketing strategies
- manage the organisation's human and financial resources, including budget preparation
- provide an appropriate working environment for employees
- liaise with the media
- provide education services to the public
- make recommendations on cultural grants
- ensure compliance with corporate and legal requirements
- provide support in policy development and report to the board of directors.

The duties of arts administrators vary according to the type of cultural or artistic environment in which they are employed, the level at which they are employed and the size of the organisation. In small organisations, arts administrators may be involved in all aspects, whereas in large organisations they usually specialise in one particular area such as marketing, education or seeking sponsorship.

Personal Requirements

- Good oral and written communication skills
- Able to relate to people of diverse backgrounds
- Good organisational and management skills
- Able to handle finances
- Able to work under pressure and to deadlines
- Able to work varying hours
- Appreciation of the role of the arts in the community

Education and Training

To become an arts administrator you usually have to complete a degree with a major in an area of the arts, followed by a postgraduate qualification in arts administration or arts management. You may also consider a bachelor degree that emphasises management or financial and business skills.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Arts administrators may work for national performing arts companies, local councils, regional community arts centres, museums, galleries, orchestras and entrepreneurial organisations such as concert and theatrical promoters. They also work for government departments and funding organisations such as the Australia Council for the Arts (www.australiacouncil.gov.au). Some are self-employed, while others work in partnerships.

Opportunities will vary depending on the level of activity in the arts and media industries in regional and metropolitan centres. The long-term job prospects for arts administrators are affected by the level of government funding and corporate sponsorship.

Related Jobs

Actor (p 94); Artist (p 95); Community Worker (p 249); Journalist (p 72); Museum Curator (p 189); Musician (p 108).

Audiovisual Technician

Audiovisual technicians operate the equipment used in the development and delivery of audiovisual presentations.

Audiovisual technicians:

- assist recording production engineers, educators and program producers and presenters to produce sound, vision and multimedia products such as television and film productions, CDs, DVDs and video sequences
- design, assemble, operate and maintain sound and vision recording, mixing and production equipment.

Audiovisual technicians work in workshops, production studios and at other locations where audiovisual presentations are delivered, such as lecture theatres and conference venues. They are also employed at live events such as concerts, festivals, sporting events and entertainment venues.

Personal Requirements

- Interested in electronic sound and vision production, and recording equipment
- Enjoy communicating information
- Normal eyesight and colour vision
- Good technical ability

Education and Training

You can work as an audiovisual technician without formal qualifications. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification in live production and services or screen and media. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become an audiovisual technician through a traineeship in Live Production and Services. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Audiovisual technicians are employed by educational institutions, broadcasting organisations and firms involved in audiovisual marketing or event production.

Prospects in this sector are aligned with advances in audiovisual technology, such as laser displays, video-conferencing, multimedia technology and digital equipment, including the delivery of services through mobile devices.

Related Jobs

Broadcasting Technician (p 97); Electronics and Communications Technician (p 291); Film and Television Camera Operator (p 100); Librarian (p 188); Stage Manager (p 111).

Body Artist

Also known as Piercer and Tattooist

Body artists decorate or modify the bodies of their customers using techniques such as tattooing and piercing. While some body artists perform a combination of these techniques, it is not uncommon for a body artist to specialise in one area, such as tattooing or piercing.

Body artists:

- consult with customers to discuss the services they require
- maintain, clean and sterilise equipment and rooms to meet the skin penetration regulations of the state or territory
- design tattoos, make line drawings from photocopies and make stencils for tattoos
- make piercings using needles and tattoos using a tattoo machine, ensuring high standards of hygiene and contamination control
- advise customers on after-care procedures
- promote themselves to increase client numbers.

Body artists work indoors and may be required to work evenings and weekends.

Personal Requirements

- Maturity
- Good interpersonal skills and an ability to put the customer at ease
- Steady hand
- Good personal hygiene
- Responsible attitude to work (to eliminate risk of transmitting blood-borne diseases)
- Comfortable with needles
- Self-promotion skills
- Artistic ability (for a tattooist)

Education and Training

To become a body artist, extensive on-the-job training is usually required. Before a reputable studio will consider you for training, you will need to display a high level of motivation and dedication, as competition for such positions can be extremely strong. In order to be considered for training as a tattooist, you will also be required to possess a high level of drawing skill and be able to produce a portfolio of your designs. The length of training can vary considerably and may range from eight to 12 months for a body piercer and up to five years for a tattooist. You will be required to observe all procedures before attempting them and will then be closely supervised the first time you attempt a new procedure. Typically, you will not be paid during this period of observation and training. During this training period, you will learn about sterilisation, cross-contamination and other health and safety issues. You may also learn about different piercing and tattooing techniques, equipment maintenance and repair, jewellery quality and selection, customer service and anatomy.

Additional Information

Many studios prefer to train individuals in their mid-twenties or older. Body artists are usually required to possess a Provide First Aid Certificate.

Employment Opportunities

Despite the growing popularity of body modification, body artistry is a highly competitive field. The majority of body artists work on a subcontractor basis and are paid for the work they do rather than a fixed salary. Job prospects may depend largely on an individual's reputation and self-promotion skills. As it is difficult to predict customer demand for body art, a body artist's income can be unpredictable.

Related Jobs

Beauty Therapist (p 277); Graphic Designer (p 102); Hairdresser (p 299); Make-up Artist (p 106).

Broadcasting Technician

Broadcasting technicians install, start up, maintain and repair equipment used for the transmission and reception of television and radio broadcast signals. This includes transmitters, microphones, mixing desks, tape recorders, CD players, computers, television cameras and telecine equipment. They may also work on microwave and satellite equipment used for the transmission and reception of voice, data and images.

Broadcasting technicians:

- check equipment to ensure it is operating properly (antennas, remote controls and auxiliary power units, for example)
- study reports and talk to equipment operators to get details of problems
- replace faulty wiring and terminals, and re-solder connections
- find and replace faulty assemblies and parts (such as capacitors, transistors, integrated circuits, printed circuit boards and transformers) using electronic test equipment
- check output power, frequency and modulation using test equipment
- assist with building, installing and adjusting new equipment.

They work mainly indoors in TV, radio or recording studios and emergency services communication centres, but also work outdoors on location. There may be some heavy lifting when moving equipment to a workshop, and they may be required to work at heights. Shiftwork is common.

Personal Requirements

- Normal eyesight and colour vision
- Good with hands
- Technical ability
- Aptitude for mathematics and science
- Adaptable and willing to learn about emerging technologies
- A fast and methodical approach to work

Education and Training

To become a broadcasting technician you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10. You can also become a broadcasting technician by completing a VET qualification in electronics and communications. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Additional Information

When working at heights, industry standards require broadcasting technicians to complete a Work Safely at Heights short course provided by a Registered Training Organisation. You may need to have an electrical licence.

Employment Opportunities

Most broadcasting technicians work in radio and television broadcasting. Some broadcasting technicians are employed by pay TV/telecommunications companies or work in the movie industry. A few are self-employed. Broadcasting technicians are also employed in other industries that produce employee communications, sales and training programs. Some commercial radio and television stations employ and train staff who are still studying for their qualifications. There is strong competition for available jobs.

Related Jobs

Audiovisual Technician (p 96); Business Equipment Technician (p 280); Electrician (p 291); Electronics and Communications Technician (p 291).

Craftsperson

Very high skill Moderate

A craftsperson designs, makes and repairs objects that have both functional and artistic qualities, working with wood, metal, glass, leather, ceramics, textiles and other materials.

A craftsperson:

- designs the style and shape of objects
- uses and manipulates materials to make objects according to the design
- finishes objects to enhance their artistic and/or practical qualities
- repairs damaged or defective craft objects.

Personal Requirements

- Artistic design skills
- Good hand-eye coordination
- Promotional skills

Education and Training

You can work as a craftsperson without formal qualifications. Some craftspersons are self-taught and many work under the guidance of an established craftsperson when learning their craft. Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification in a craft-related area, such as visual arts or design. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a craftsperson by completing a craft-related degree at university, such as fine arts, visual arts, creative arts or design. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. In most cases applicants are required to attend an interview and submit a folio of work. A high level of talent is required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Most craftspersons are involved in small business operations and often rely on exhibition sales and commissioned pieces for income. Exhibitions and major commissioned pieces provide opportunities to become well known and, therefore, increase business prospects. Work is sold wholesale to shops, galleries and department stores or directly from the studio. Few craftspersons are employed full time in their craft. Often other career opportunities develop in craft education, administration, curating, museum and gallery conservation or community artwork.

Related Jobs

Artist (p 95); Florist (p 295); Graphic Designer (p 102); Leather Goods Maker (p 302); Taxidermist (p 323); Teacher - Art (p 125).

Dancer

$1,366 Very high skill Strong

Also known as Ballerina , Ballet Dancer , Jazz Dancer and Contemporary Dancer

Dancers are performers who entertain audiences by dancing as soloists, with a partner or as members of a group. There are many styles of dance, including ballet, contemporary, Aboriginal and Torres Strait Islander, folk, jazz, ballroom and tap. Dancers may perform using a variety of styles, or they may specialise in one particular dance style.

Dancers:

- attend auditions
- rehearse dance steps and movements under the direction and instruction of a choreographer
- develop their own interpretation of a role
- train daily to maintain or improve technical standards, fitness and flexibility, and to help reduce the risk of injury when rehearsing or performing
- perform styles of dance as the company, project or choreographer requires
- sing or act as part of a performance
- apply their own make-up for performances
- choreograph dance works or routines.

Most professional classical dancers have studied ballet from a young age. However, some modern dancers, particularly men, begin training as late as 16. Working as a dancer is physically demanding. Rehearsal and performance hours can be long and unpredictable.

Specialisations

- Choreographer
- Community Dance Worker
- Dance Teacher
- Dance Therapist

Personal Requirements

- Discipline, dedication and perseverance
- Physically flexible and well-proportioned
- Good sense of rhythm
- An appreciation of music
- High-level technical and interpretive skills
- Good general health and an ability to reach high levels of fitness
- Good communication skills

Education and Training

To become a dancer you usually have to complete a VET qualification in dance. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information. In many cases, a natural ability in dance is more important than formal qualifications.

You can also become a dancer by completing a degree in arts, applied dance, creative arts or fine arts, with a major in dance, dance performance or a related field. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. You may also be required to attend an audition or interview. Some courses offer intensive training for a performance career, while others qualify graduates to teach dance or provide a background that will enable graduates to take up other dance-related careers such as choreography and community arts work. Institutions have different prerequisites

and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

The Australian Ballet School and the National Aboriginal Islander Skills Development Association (NAISDA Dance College) conduct auditions in most states and territories for their diploma programs each year. see www.naisda.com.au for more information.

Employment Opportunities

Employers of dancers in Australia include the Australian and state ballet companies, contemporary dance companies, independent choreographers, musicals, television studios and some opera companies. Opportunities to perform, teach choreography and manage dance projects also exist for Aboriginal and Torres Strait Islander people trained in traditional dance styles. All performance positions require an audition and interview with the director of the company or project.

Although some dancers are employed on a permanent basis with dance companies, many perform in small companies or as independent artists and acquire roles in shows or video clips that require their particular dance skills. Freelance dancers must audition for roles as they come up. Some dancers have agents who inform them of available auditions, but most look for audition advertisements or join the professional association, Ausdance. Competition for performance work is very strong.

Accomplished dancers may teach once they have had sufficient experience and training. Skills in acting and singing, or experience in film and video production, may improve employment options. Many dancers progress to areas such as arts administration, theatre management, public relations, technical backstage work, production, wardrobe and costume-making.

Related Jobs

Artist (p 95); Arts Administrator (p 95); Film, Stage and Television Director (p 102); Model (p 107); Sportsperson (p 271).

Fashion Designer

Fashion designers plan and develop new clothing and accessory styles by creating original designs or by adapting fashions to suit local conditions and trends. They fabricate sample garments based on these designs.

Fashion designers:

- consult with clients and stakeholders to determine the objectives of the design brief and to negotiate design solutions
- illustrate concepts by producing storyboard and specification drawings
- use computers to manipulate and develop patterns and modify designs
- research and develop fabrics and accessories for production of garments
- make patterns or work closely with patternmakers to draft patterns from sketches or specification drawings
- select fabric, colour and trim, and undertake cutting and machining of sample garments
- fit samples and discuss them with management, sales and manufacturing staff
- contribute to costing estimates
- finalise specification sheets with detailed sketches and trim details
- approve final samples before they go into production
- liaise with production staff during mass production of garments and participate in quality control
- maintain an awareness of current global and local fashion trends
- control merchandising and retailing of garments.

Personal Requirements

- Enjoy artistic and creative activities
- Creative flair and drawing ability
- Good communication skills
- Good colour and design sense
- Good hand-eye coordination
- Able to work independently or as part of a team
- Good time management skills
- Able to work under pressure

Education and Training

To become a fashion designer you usually have to complete a VET qualification. Applicants may be required to attend an interview and/or submit a folio of their work. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a fashion designer by completing a degree in fashion design or fashion and textiles. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Applicants may be required to attend an interview and/or submit a folio of their work. A number of institutions in Australia offer degrees in these areas. Institutions have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Fashion designers work for manufacturing houses, small businesses or retailers. They may design ready-to-wear clothing or one-off garments to be sold to retailers or directly to the public. They tend to specialise in one area, such as menswear, children's wear, knitwear or lingerie.

In addition, opportunities exist for specialist work in an established business as a designer, cutter, patternmaker/grader, sample machinist, general machinist or subcontractor. Fashion designers may also become trainers in the industry.

The fashion industry is highly competitive and success depends on talent and determination. Vacancies are extremely limited for trainees wanting to work their way up to fashion designing. Some employers promote employees who have gained practical experience in the industry.

A limited number of vacancies for qualified and experienced designers exist in both large fashion companies and smaller clothing manufacturing firms. Most vacancies occur in large capital cities, especially Sydney and Melbourne. Some opportunities exist for talented and experienced designers to establish their own businesses or work on a freelance basis.

Related Jobs

Industrial Designer (p 104); Interior Decorator (p 105); Jeweller (p 106); Milliner (p 306); Model (p 107); Textile Designer (p 112); Visual Merchandiser (p 113).

Film and Television Camera Operator

$1,539 | Very high skill | Strong

Film and television camera operators set up, position and operate equipment in studios or on location to photograph or record people, events and scenes.

Film camera operators use 16mm and 35mm film cameras or digital video for motion pictures, whereas television and video camera operators use cine-electronic television or digital video and video cameras for direct telecast and recording.

Film and television camera operators:

- discuss with the director the types of film, video and lenses to be used, as well as focus and distance settings and camera angles
- select and set up equipment and accessories
- check that lighting has been organised or set up lights as required
- view scenes through viewfinders, make final adjustments and photograph scenes
- monitor equipment during operation
- move cameras and adjust controls to follow the action of scenes being photographed
- consult with other technical workers such as light or sound technicians to obtain required results
- supervise assistants during the production phase.

Film and television camera operators work as part of a team and are often required to work long and irregular hours, including nights and weekends. They may need to travel to remote areas. Work can take place indoors and outdoors.

Specialisations

- Director of Photography

Personal Requirements

- Able to accept direction
- Highly organised
- Attention to detail
- Patient
- Able to work under pressure
- Good communication skills
- Creativity
- Able to work as part of a team

Education and Training

To become a film and television camera operator you usually have to complete a VET qualification. Applicants may be required to attend an interview and/or submit a folio of work. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a film and television camera operator through a traineeship in Media. Entry requirements may vary, but employers generally require Year 10.

Alternatively, you can become a film and television camera operator by completing a degree in creative arts, media, screen production, or film and television. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Applicants may be required to attend an interview and/or submit a folio of work. Institutions have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

A drivers licence is an advantage as camera operators are often required to drive to and from locations.

Employment Opportunities

Camera operators may be employed by television broadcasters and film companies. The demand for camera operators depends on levels of investment in film and television production, as well as the introduction of new technology. Competition for entry-level positions is strong and people appointed have usually been employed in some other aspect of film and television production. Promotion to the level of camera operator depends on demonstrated skills and proficiency, as well as full knowledge of the various types of cameras used.

Related Jobs

Audiovisual Technician (p 96); Film and Television Editor (p 100); Film and Television Lighting Operator (p 101); Photographer (p 109).

Film and Television Editor

$1,539 | Very high skill | Strong

Film and television editors edit and assemble films and videos from raw, unedited footage ('dailies' or 'rushes'), taking into account the mood, pace and climax of films or television productions.

Film and television editors:

- view processed film and video with production personnel to analyse, evaluate and select scenes and to decide which scenes need to be improved or reshot
- trim film and copy video segments to specific lengths, arranging and joining them in sequence as a final product or for inclusion within a subsequent broadcast or longer production
- import, compile and render digital audio and visual footage on a computer to enable the content to be presented with maximum effect
- select and incorporate visual effects and transitions for maximum effect
- select stock shots from a film library and edit and incorporate them into film or video.

There is often a need to work long or irregular hours. Work may need to be carried out on location.

Personal Requirements

- Artistic flair and interest in visual media
- Patience
- Attention to detail
- Able to work as part of a team
- Able to take direction
- Lateral thinking

Education and Training

You can work as a film and television editor without formal qualifications. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. Applicants may be required to attend an interview and/or submit a folio of work. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a film and television editor through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Alternatively, you can become a film and television editor by completing a degree in creative arts, media, screen production or film and television. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Applicants may be required to attend an interview and/or submit a folio of work. Institutions have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Film and television editors work for film companies, television stations and video production houses. They may also work on a freelance basis.

Competition for jobs is very strong and interstate and/or overseas experience is often needed to enhance employment prospects. Completion of a course will not guarantee entry to this occupation. Employment and advancement depend on the person having considerable experience and talent.

Related Jobs

Film and Television Camera Operator (p 100).

Film and Television Lighting Operator

Also known as Gaffer and Lighting Designer

Film and television lighting operators position, set up and operate lighting equipment to light sets or studios during stage performances, television broadcasts or film productions.

Film and television lighting operators are responsible, both creatively and technically, for lighting interior and exterior scenes and must achieve desired effects through the placement, intensity and colour of lighting.

Film and television lighting operators:

- study scripts and discuss lighting effects with production staff
- coordinate activities with electrical crew when putting up metal scaffolding to support lighting equipment
- select and position equipment such as spotlights and floodlights
- arrange and connect cables to electrical supplies using portable junction boxes
- operate lights during filming or broadcasting and vary intensity of light using various filters and reflective screens
- maintain and repair lighting equipment
- arrange for transportation of equipment to remote locations.

Film and television lighting operators may be required to travel to remote locations. They usually work irregular hours or shifts.

Personal Requirements

- Patient
- Enjoy the technical aspects of film and television production
- Able to work as part of a team
- Creative

Education and Training

You can work as a film and television lighting operator without formal qualifications. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. Applicants may be required to attend an interview and/or submit a folio of work. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a film and television lighting operator through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Film and television lighting operators are employed by television stations and film and television production companies. Competition for entry-level positions is very strong.

Related Jobs

Film and Television Camera Operator (p 100); Photographer (p 109); Stage Manager (p 111).

Film and Television Producer's Assistant

Also known as Production Assistant

Film and television producers' assistants provide technical and other assistance for the production, recording and/or broadcasting of artistic performances, news, sports and special events.

Film and television producers' assistants:

- provide clerical assistance, compile details of program requirements and arrange artists' rehearsal times
- assist with the preparation of music, written material and photography to be included in the production of the program
- advise studio floor personnel of camera cues
- keep records of filmed sequences for visual and narrative flow.

Specialisations

- Film and Television Producer

Personal Requirements

- Organisational and administrative skills
- Attention to detail
- Interested in film and/or television
- Able to work as part of a team

Education and Training

You can work as a film and television producer's assistant without formal qualifications. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. Applicants may be required to attend an interview and/or submit a folio of work. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a film and television producer's assistant through a traineeship in Broadcast Technology, Creative Industries (Media) or Screen and Media. Entry requirements may vary, but employers generally require Year 10.

Alternatively, you can become a film and television producer's assistant by completing a degree in creative arts, media, film production or media arts and production, with a major in film and television. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Applicants may be required to attend an interview and/or submit a folio of work. A number of institutions in Australia offer degrees in these areas. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Film and television producers' assistants are employed by film companies, television stations, video production houses and theatre companies.

Competition is very high for available positions, and patience and persistence are necessary to succeed.

Related Jobs

Film and Television Camera Operator (p 100); Film and Television Editor (p 100); Film, Stage and Television Director (p 102).

Film, Stage and Television Director

$1,539 | Very high skill | Strong

Also known as Movie Director , TV Director , Theatrical Director and Radio or Television Director

Film, stage and television directors direct the overall production, or specific aspects of the production, of films, television programs or stage shows. They have the final responsibility for making sure that everything is ready to be filmed or performed.

Film, stage and television directors:

- study scripts to determine artistic interpretation
- plan and arrange for set designs, costumes, sound effects and lighting
- select actors for roles in the production by viewing performances and conducting screen tests and auditions
- plan, direct and coordinate filming or taping, instructing camera operators on the position and the angle of their shots and coordinating changes in lighting and sound
- edit film or videotape and add soundtrack and other effects
- coordinate the activities of the studio/stage crew, performers and technicians during rehearsals and productions.

Personal Requirements

- Artistic flair
- Good communication skills
- Able to remain calm under pressure
- Able to exercise authority

Education and Training

You can work as a film, stage and television director without formal qualifications. Entry to this occupation usually requires extensive experience in the film, television or theatre industries. Your employment prospects may be improved if you have qualifications. You may like to consider a VET qualification. Applicants may be required to attend an interview and/or submit a folio of work. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a film, stage and television director through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Alternatively, you can become a film, stage and television director by completing a degree in screen and media, film and television, theatre or creative arts. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Applicants may also be required to attend an interview and/or submit a folio of work. Institutions have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Film companies, television stations, video production houses and theatre companies employ film, stage and television directors.

Competition for jobs is very high and interstate and/or overseas experience is often needed to enhance employment prospects. Completion of a course will not guarantee entry to this occupation. Employment and advancement depend on considerable experience and talent.

Related Jobs

Dancer (p 98); Film and Television Camera Operator (p 100); Film and Television Editor (p 100); Multimedia Developer (p 75).

Graphic Designer

$1,346 | Very high skill | Strong

Graphic designers produce visual communications, including art and layouts of text for reproduction in print and electronic media such as magazines, newspapers, books and websites, as well as image designs for corporate identity programmes, exhibitions and advertising. Graphic designers may specialise in a number of fields, including brand and identity strategy; digital and web-based design; television, film and computer graphics; set and exhibition design; corporate design; book and magazine design; and advertising and illustration. They may progress to positions such as design directors, art directors or creative directors.

Graphic designers:

- talk to clients to get a clear understanding of their visual communication requirements and develop design 'roughs' (sketches)
- prepare comprehensive layouts of the design using techniques such as photography, illustration and computer-generated imagery

- identify communication problems and develop visual solutions
- present and propose designs to clients for approval
- prepare designs for print or digital publication and signage
- design and set up exhibitions for advertising or educational purposes
- supervise all design production stages, including arranging and supervising printing.

Graphic designers may work as members of a design team in design studios or advertising agencies, or alone undertaking consultancy or freelance work.

Personal Requirements

- Creative and imaginative
- Understanding of colour and form
- Able to work under pressure and meet deadlines
- Good communication skills
- Good marketing abilities
- Able to work as part of a team

Education and Training

To become a graphic designer you usually have to complete a VET qualification. Applicants may be required to attend an interview and/or submit a folio of work. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you have a degree in graphic design or a related area such as digital media or visual communication design. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and a visual arts or design subject are normally required. Applicants may also be required to attend an interview and/or submit a folio of work. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Graphic designers are required to have computer and technical skills.

Employment Opportunities

Graphic designers work for advertising agencies, graphic design houses, commercial art studios, computer game developers, retail stores, printing firms, book and newspaper publishers, and marketing and public relations firms. They often work as part of a team, but may also work on a freelance basis.

Quality, individuality, skill and a high standard of work are needed to find employment. Competition for jobs is very high and many employers consider the quality of artwork in a graduate's portfolio to be the most important selection criterion.

Smaller design studios often prefer graduates who can do their own artwork as well as formulate design concepts. There may also be opportunities to move into related industries such as film and television.

Related Jobs

Artist (p 95); Body Artist (p 96); Games Developer (p 83); Interior Designer (p 105); Multimedia Developer (p 75); Textile Designer (p 112); Web Developer (p 90).

Illustrator

$1,346 Very high skill Strong

Illustrators create drawings and designs for books and magazines, advertisements, film, television and multimedia. Illustrators work on paper, and two-dimensional (2D) and three-dimensional (3D) models. They may use traditional or computer-based techniques, or a combination of both. Illustrators can specialise in illustrations for websites, phone apps, augmented reality development, magazines, children's books, scientific work, technical manuals, fashion and product packaging. Many work as freelancers. They may have to work very long hours when a deadline has to be met.

Illustrators:

- study the project brief (instructions) and select an appropriate style, technique and medium to use
- research a topic by looking at photographs, artworks, advertisements and books, and by observing people, animals and plants
- prepare sketches, layouts and storyboards to try out different ideas
- create illustrations using charcoal, pen, ink, paint, photography and computer graphics software
- create and model creatures, characters, environments and interiors for 2D and 3D computer animations
- discuss the project with clients and the production team, making changes as requested.

Illustrators can specialise in illustrations for websites, phone apps, augmented reality development, magazines, children's books, scientific work, technical manuals, fashion and product packaging. Many work as freelancers. They may have to work very long hours when a deadline has to be met.

Specialisations

- Animator
- Cartoonist

Personal Requirements

- High level of drawing skill
- Problem-solving skills
- Excellent listening skills
- Willingness to experiment with different techniques
- A feeling for movement and timing
- Aptitude for working with computers

Education and Training

You can work as an illustrator without formal qualifications. Skills are usually developed through practice and experience.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become an illustrator by completing a degree in animation, graphic design, digital media, new media design, fine arts, creative arts, visual arts or visual communication. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Applicants may also be required to attend an interview and/or submit a folio of work. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Most work is in the eastern states or overseas, with designers, game developers, mobile app developers, book and magazine publishers, advertising agencies and film production studios. It is a highly competitive industry.

Computer-based techniques for illustration and animation have taken over from traditional techniques to a large extent, so having strong skills in both these areas is very important.

Freelance animators may develop their own characters and stories to produce features to sell to television or film distributors. Others work in commercial animation studios as part of a team, performing a variety of production tasks, such as colouring drawings or painting backgrounds and characters for film and television studios and game developers. Much of the work is concentrated in a small number of animation studios in Sydney.

Job opportunities depend on the level of government, private and corporate funding for projects that require illustration. At the individual level, finding employment depends on the quality of the animator's work and their reputation in the industry.

Related Jobs

Artist (p 95); Games Developer (p 83); Graphic Designer (p 102); Multimedia Developer (p 75); Writer (p 191).

Industrial Designer

Industrial designers create and produce designs for commercial, medical and industrial products. They also make models and prototypes of these designs for mass production.

The products that industrial designers create cover a wide range of manufactured goods, from toys and toasters to furniture and heavy machinery. Some work is carried out on the development of new products. Other work is related to updating and improving the design of existing products.

Industrial designers:

- discuss manufacturers' and clients' requirements
- undertake research and development
- consider factors influencing product design, such as cost, selection of materials, production methods, new technology, safety, fashion trends, ergonomics, the environment, marketing and business strategy
- prepare presentation sketches showing style, size, shape, configuration of internal components and general appearance of products, either by hand or using a computer
- supervise construction of models or samples of products and test them for function, quality and consumer appeal
- estimate production costs
- make engineering drawings and detailed diagrams of products and report these to manufacturers
- modify designs where necessary to meet manufacturing or cost requirements.

Industrial designers work closely with other professionals in the field, such as engineers, manufacturers, market researchers, marketing consultants, drafters and product testing staff.

They work in studios when creating and refining designs, using their hands and/or computer-aided design. They may also spend time in the field observing and researching product usage, and in manufacturing plants observing methods of production and collecting information about new materials and production processes. Designers may work long hours and experience periods of intense pressure when deadlines must be met.

Personal Requirements

- Aptitude for problem-solving
- Patient
- Creative and practical
- Aptitude for technical activities
- Good communication skills

Education and Training

To become an industrial designer you usually have to complete a degree in design, engineering or industrial design at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics and physics are normally required. Applicants may also be required to submit a portfolio of work, sit a test and/or attend an interview. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

After gaining some industry experience, graduates may qualify for full membership of the Design Institute of Australia. Student, graduate or associate membership may also be available prior to meeting the requirements for full membership. Graduates may also be eligible for membership of Engineers Australia. Visit their websites for more details.

Employment Opportunities

Most industrial designers work for manufacturing firms. They also work for private consultancies and government departments.

Most designers should expect to spend several years after graduation engaged in industry gaining experience as staff designers before attempting to enter the highly demanding field of design consulting. Most manufacturers prefer industrial designers to have had some previous commercial experience.

There is a broad range of opportunities in product design, including one-off commissions, small-scale production and industrial production. There are also opportunities to establish designer/maker practices specialising in such disciplines as objects of art and furniture.

Related Jobs

Architect (p 43); Artist (p 95); Biomedical Engineer (p 233); Graphic Designer (p 102); Industrial Engineer (p 141); Interior Designer (p 105); Mechanical Engineer (p 143); Model Maker (p 107); Multimedia Developer (p 75); Textile Designer (p 112).

Bachelor of Design
Bring your boldest ideas to life
Explore your creativity and apply innovative design thinking to transform how societies live, communicate and interact.
study.unimelb.edu.au
POSTERA CRESCAM LAUDE
THE UNIVERSITY OF MELBOURNE
CRICOS 00116K

Interior Decorator

$1,146 High skill Very strong

Interior decorators plan and implement decoration schemes for homes, offices, shops, hotels and venues.

Interior decorators:

- advise clients on the selection of colour schemes, layout, lighting, furniture, floor coverings, curtains, paint, wallpaper and hardware products (such as curtain fittings)
- visit clients' premises to look at existing conditions and make measurements
- provide sketch designs, specifications and cost estimates to the client for approval
- supervise and coordinate the installation and arrangement of furniture and furnishings
- undertake direct selling if working in a retail shop.

Interior decorators may have to work extended or irregular hours to meet clients' needs.

Personal Requirements

- Creativity
- Good understanding of colour
- Able to promote ideas
- Awareness of fashion and design trends
- Able to interact well with a variety of people

Education and Training

You can work as an interior decorator without formal qualifications, but employers usually require Year 10. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. Applicants may be required to attend an interview and/or submit a folio of work. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Employment Opportunities

Interior decorators work as retail decorator consultants, freelance decorators, consultants and managers with large department outlets, architectural support staff, colour scheme coordinators, retail sales assistants and decorators for the wholesale sector of the profession. Some experienced decorators establish their own businesses.

Competition for employment as an interior decorator is very strong. A good deal of training takes place on the job and, as with other artistic areas, those who can demonstrate a high degree of talent and flair are more likely to gain employment.

Related Jobs

Interior Designer (p 105); Upholsterer (p 330); Visual Merchandiser (p 113).

Interior Designer

$1,155 Very high skill Strong

Interior designers design and supervise the construction or redevelopment of building interiors.

Interior designers:

- speak to clients and architects to determine clients' needs and intentions, and to ensure safety requirements are met
- develop designs that are appropriate, functional and aesthetically pleasing
- prepare working drawings and specifications for interior construction, materials, finishes, space planning, lighting, furnishings and equipment
- estimate costs of materials, labour and time, and give estimates to clients for approval
- organise supplies and prepare detailed instructions for tradespeople
- inspect the work of suppliers and tradespeople, and maintain time, cost and quality controls
- work with specialists in technical areas concerned with fire, hydraulics, and mechanical, electrical and structural design, ensuring industry regulations are met
- prepare and administer tenders and contract documents
- re-design the interiors of old buildings and design furnishings to be made by cabinetmakers, antique furniture restorers and other tradespeople
- design exhibitions, commercial display stands or stage, film and television production sets.

Interior design requires an understanding of building construction, lighting, colour and furniture.

Interior designers may work individually as consultants or with a design group. They visit clients in their homes and offices, and can often work long hours, including evenings and weekends. They usually work for clients on an agreed fee basis.

Personal Requirements

- Creative and artistic flair
- Good at problem-solving and lateral thinking
- Able to work independently or as part of a team
- Good communication skills
- Aptitude for technical drawing and illustration

Education and Training

To become an interior designer you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you have a degree in applied design, interior design, interior architecture or spatial design. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Applicants may also be required to attend an interview and submit a folio of recent design work. Institutions have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Interior designers can work on a wide range of projects, including residential, commercial, retail, hospitality and institutional developments such as schools and hospitals, as well as stage, film and television productions.

Major employers include large construction firms, architects, some government departments and large retail stores. Opportunities also exist for self-employment as consultants.

Competition for jobs is very strong. Initially, interior designers may look for work interstate or overseas where a wider range of experience is available.

Related Jobs

Architectural Draftsperson (p 43); Industrial Engineer (p 141); Upholsterer (p 330); Visual Merchandiser (p 113).

Jeweller

Medium skill

Moderate

Jewellers design and make jewellery and small objects using a wide range of materials, including metals, stones, woods, plastics and fibres. Jewellers may specialise in making particular types of jewellery (such as rings) or in using specialised techniques (such as enamelling, engraving, anodising or casting).

Jewellers:

- create design drawings and specifications for wearable or three-dimensional objects
- shape metal and other materials by cutting, filing, hammering, turning, spinning, bending, casting, folding and linking using specialised hand and power tools and equipment
- assemble articles using soldering, screwing, riveting and other joining methods
- finish articles using files, emery paper, buffing machines or other appropriate tools and equipment
- secure gemstones in settings
- engrave designs on ring settings, brooches, bracelets and other articles
- repair jewellery by soldering, replacing or rebuilding worn or broken parts
- remodel old jewellery
- sell jewellery direct to the public or to retail jewellery shops.

Jewellers may work using mass production techniques and machinery, concentrating on one part of the work, or as more highly skilled craftspeople producing an entire piece from beginning to end.

Personal Requirements

- Enjoy artistic and creative work
- Good eyesight (may be corrected)
- Good hand-eye coordination
- Able to work carefully and accurately
- Creative design ability
- Enjoy making things
- Patient and able to persevere

Education and Training

To become a jeweller you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

You can also become a jeweller by completing a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Alternatively, you can become a jeweller by completing a degree at university.. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Applicants may also be required to attend an interview and submit a folio of work. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Jewellers may work for manufacturing firms. Many run their own jewellery business and sell direct to the public or supply work to galleries on commission or at wholesale prices.

Most job opportunities for jewellers are in capital cities, followed by larger country centres. Competition for apprenticeships is very strong, with a limited number offered each year.

Related Jobs

Artist (p 95); Craftsperson (p 98); Fashion Designer (p 99).

Make-up Artist

$1,327

Medium skill

Stable

Make-up artists apply make-up to fashion and photographic models; actors and other performers involved in stage, film and television productions; brides; and other clients for special occasions.

Make-up artists:

- prepare the skin for make-up application and remove make-up as required
- demonstrate cosmetic products to clients
- instruct clients about make-up application
- apply a wide variety of professional make-up products
- design wigs, beards, masks and prosthetics (artificial body parts) and apply them to achieve an appropriate character appearance
- use make-up to produce effects such as ageing, illness, scars and bruising
- alter or maintain make-up during productions to ensure the continuity of a performer's appearance
- advise hairdressers on the hairstyle required for character parts.

Personal Requirements

- Artistic ability
- Good colour perception
- Patient and tactful
- Good communication skills
- Good hand-eye coordination
- Able to work under pressure

Education and Training

You can work as a make-up artist without formal qualifications. You will probably get some informal training on the job through experience in beauty salons, cosmetic companies or amateur theatrical companies.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a make-up artist through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Make-up artists are employed in the film, stage and television industries. They may also work on photographic shoots, promotions, fashion parades and in the make-up and cosmetic retailing industry. They are often self-employed and may work on a freelance basis.

Competition for jobs is strong, and interstate or overseas experience is often needed to enhance employment opportunities.

Related Jobs

Body Artist (p 96); Nail Technician (p 308).

Model

Models wear and display clothes, accessories and other consumer goods, and promote services in ways designed to generate sales. They may demonstrate new products and services at exhibitions or pose in front of the public or cameras. Models may specialise in particular types of modelling, such as editorial (publications), commercial (film, TV and photographs for commercial products) and fashion shows

Models:

- walk, dance or pose before audiences on catwalks to display clothing and accessories
- pose in front of cameras wearing fashion clothing or promoting products for advertisement in newspapers, in magazines, on websites or on billboards
- participate in commercials for television and cinema
- participate in wholesale clothing showings to buyers
- demonstrate new products and services at manufacturers' exhibitions and industry trade shows
- hand out pamphlets or samples of advertising products at exhibitions and shows.

Personal Requirements

- Enjoy artistic and creative activities
- Dedicated and patient
- Minimum height in certain types of modelling
- Well-proportioned facial features, clear skin and healthy hair
- Neat personal appearance
- An outgoing personality
- Good communication skills are essential in promotional work

Education and Training

You can work as a model without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have qualifications but they are not required as a condition of entry into this career.

Additional Information

Prospective models should first approach a reputable model agency who will assess their suitability for this industry. If successful, the agency will arrange for a photographic folio and composite card (showing personal statistics and fashion images) to be made for them to help obtain work. The agency will then promote them to local clients with eventual possibilities for placement in global markets.

It is advisable to make sure that the agency has a good reputation and is well established in the industry. The modelling agency may charge for the required training but reputable agencies do not charge money to register. There are additional costs related to photographic portfolios and composite cards.

Employment Opportunities

Most models work for clothing firms and department stores, advertising and publicity agencies, and in film or television studios. Some work as teachers in modelling and deportment schools.

Employment opportunities in modelling are very competitive. Many models work part time while undertaking other activities, such as studying, or combine modelling with other paid part-time work. The possibility exists for models to work overseas.

Models can move into careers associated with modelling, such as public relations, television presenting or fashion buying and consultancy positions. A model who has good communication skills may become a fashion-show compere (host) and coordinator. Entry into these fields is highly competitive.

Related Jobs

Dancer (p 98); Fashion Designer (p 99).

Model Maker

Model makers construct full-size and scale models of landscape, engineering, architectural, automotive and other industrial designs. They work from scale drawings, plans, photographs and lists of figures or specifications requiring conversion to three-dimensional form. These models help designers to see how a project, such as a building or a car, will look or work before it is completed. Some model makers, such as automotive clay modellers, may specialise in high-quality artistic work, while others may concentrate on technically accurate models.

Model makers:

- look at drawings, drafts or samples and consult designers about specifications
- choose suitable material, mark out parts, determine layout and cut out pieces using the appropriate cutting equipment for the material being used
- construct models using a variety of adhesives, machinery and hand tools
- operate computer modelling programs
- colour a model using paint, varnish and other finishes
- add details to create authenticity such as windows, road lines and lettering
- construct working models, such as model furnaces, to test if they work properly prior to construction
- comply with local or national design standards
- alter models to meet new specifications.

Model makers work in industrial research or design and development laboratories, which may be in offices or open workshops.

Personal Requirements

- Enjoy practical and manual activities
- Good hand-eye coordination
- Able to visualise three-dimensional forms when looking at a technical drawing
- Creative and practical
- Able to work quickly and accurately
- Good at mathematics

Education and Training

You can work as a model maker without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have qualifications and you may like to consider a VET course. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Employment Opportunities

Most model makers work on a contract basis. There are a number of companies that undertake model making for a wide range of activities, including architectural, engineering and topographical models, promotional displays, stage props and sculptures.

Related Jobs

Engineering Tradesperson - Fabrication (p 293); Industrial Engineer (p 141).

Music Therapist

Very high skill Strong

Music therapists provide therapeutic programmes through the planned and controlled use of music to help people of all ages, including those with special needs because of social, emotional, psychiatric, physical or intellectual impairments.

Music therapists:

- assess individuals and groups to identify abilities and needs, and develop objectives that address clients' needs
- plan and carry out specific music-making activities to address the client's needs and concerns, such as singing, moving to music, reflective music listening, playing music, music and drama, improvisation, song writing and other creative activities
- assess, monitor and evaluate the effectiveness of the musical and therapeutic interactions.

Music therapists require a large repertoire of popular songs relevant to all age groups, and the ability to explore, interpret and develop the creative use of sound. Music therapists work with children and adults in individual and group settings.

Personal Requirements

- An appreciation for a wide range of music styles
- High level of musical ability
- Able to respect and relate to people of all ages, cultures and backgrounds

Education and Training

To become a music therapist you usually have to complete a degree followed by a postgraduate qualification in music therapy. Graduates with a degree in teaching, music, occupational therapy, nursing, psychology or a relevant allied health field can be considered for postgraduate degrees if they possess an appropriate level of musical experience and practice on a particular instrument.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education with English. Applicants may also be required to attend an audition and undertake a musicianship test. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Institutions have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

On successful completion of an appropriate course, graduates may be eligible for registration with the Australian Music Therapy Association. Employers are increasingly looking to hire music therapists registered with the association.

Employment Opportunities

Music therapists work in homes, schools, childcare centres, community support groups, hospitals, clinics, community centres, aged-care facilities, hospices, rehabilitation centres and centres for people with disability. Music therapists are also employed in private practice.

Job opportunities depend on the number of people in the community requiring this type of service, level of awareness in the community of the benefits of music therapy and government policy, legislation and funding for community health care, education and social services.

Related Jobs

Art Therapist (p 94); Diversional Therapist (p 172); Occupational Therapist (p 225).

Musician

$1,662 Very high skill Stable

Musicians write, arrange, orchestrate, perform, record and conduct musical compositions. A musician may perform a variety of tasks depending on their area of specialisation.

Musicians:

- study and rehearse musical scores prior to performances
- play music in recitals as an accompanist or as a member of an orchestra, band or other musical group, from score or by memory
- make recordings for sale or promotion on compact disc or online
- create accompanying videos for the music
- provide musical backing for television commercials, popular recordings, radio, television or film productions
- improvise, transpose, compose or arrange music
- play under the direction of a conductor.

Musicians must be prepared to work irregular hours and spend long periods in practice and rehearsal. Some musicians work in areas unrelated to music to support themselves. Many professional musicians with experience in all styles combine music performance and music teaching careers in Australia.

Specialisations

- Music Critic
- Musicologist

Personal Requirements

- Musical skills
- Stamina to perform at peak level
- Self-confidence, motivation, dedication and determination
- Good communication skills
- Able to concentrate for long periods
- Mastery of one or more styles of music such as classical, jazz or pop
- Flair for entertainment

Education and Training

To become a musician you usually have to complete formal training in a chosen musical field, although some musicians are self-taught. You may like to consider a VET qualification. Applicants may be required to attend an audition, interview or musicianship/music proficiency theory test. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Alternatively, you can become a musician by studying music at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and music are normally required. Applicants may also be required to attend an audition, interview or musicianship/music proficiency theory test. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Musicians work in a number of different areas. Many are self-employed or are engaged through agents. They may become music or singing teachers and set up their own practice or be appointed to the staff of a primary or secondary school, conservatorium, private music school or university. There are also careers available with the Australian Broadcasting Corporation, commercial radio and television stations and the Australian Defence Force, as well as in music librarianship, arts

administration, music journalism, music and instrument sales, music and record publishing, music direction and musicological research.

Employment for musicians may be affected by the level of government funding available, particularly for orchestras and opera companies. The level of activity in the hospitality industry may also affect employment opportunities.

Related Jobs

Arts Administrator (p 95); Dancer (p 98); Music Therapist (p 108); Sound Technician (p 111); Teacher - Music (p 127).

Photographer

Very high skill Moderate

Photographers operate cameras and lighting equipment to take photographs of people, places, products and other subjects. Areas of specialisation in photography include photojournalism, fashion, food, scientific, commercial, industrial, medical, portrait, wedding, advertising, landscape, art and architectural.

Photographers:

- operate a range of cameras, lights and light-measuring devices
- determine the required camera angle, light positions, exposure and composition
- offer technical solutions to illustrative problems
- advise on photographic approaches and the selection of locations, props, models and colour coordination
- use computers for the production of images in print or digital form as well as tasks such as image manipulation and post-production work.

Photographers stand most of the time and often carry heavy equipment. They may work on location or in a studio and can spend long periods of time in front of a computer doing post-production work. While most modern photographers use digital cameras, some may choose to use film and either develop photographs themselves in a darkroom or send the film to specialised photographic processors.

Personal Requirements

- Artistic flair
- Eye for detail
- Able to learn the technical aspects of photography
- Self-motivated
- Able to take initiative
- Good problem-solving skills
- Interest in contemporary styles and trends in graphics, architecture and fashion is an advantage

Education and Training

You can work as a photographer without formal qualifications. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications and you may like to consider a VET course. Applicants may be required to submit a folio of work and/or attend an interview. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a photographer by completing a degree in photography or photo media. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Applicants may be required to submit a folio of work and/or attend an interview. Access to a suitable camera is also required. Photography courses usually have high materials costs and entry is highly competitive. Institutions have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Most photographers are self-employed and receive work on commission from advertising agencies, graphic design studios, and retail, manufacturing and service companies. They also receive commissions from printing houses, architects and the public for weddings and portraiture. A small number work as photojournalists.

Related Jobs

Artist (p 95); Audiovisual Technician (p 96); Craftsperson (p 98); Film and Television Camera Operator (p 100); Film and Television Lighting Operator (p 101).

Production Crew Member

$1,327 Medium skill Stable

Also known as Roadie

Production crew members look after the setting up, dismantling, removal and maintenance of music and theatre production equipment for stage performances. They also transport and maintain equipment between shows.

Production crew members:

- implement stage design under the direction of the stage manager
- select and position sound and lighting equipment
- carry, maintain and repair production equipment
- arrange for transportation of equipment to remote locations
- arrange and connect cables to the electrical supply using portable junction boxes
- monitor security and handle cash.

Production crew members may be required to travel long distances and to remote locations when on tour with a show. They work irregular hours or shifts.

Personal Requirements

- Able to work as part of a team
- Able to cope with the physical demands of the job
- Able to work under pressure and at heights
- Flexible attitude toward working hours and conditions
- Creativity

Education and Training

You can work as a production crew member without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have qualifications and you may want to consider a VET course. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a production crew member through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Production crew members are employed by theatre groups, production companies, event venues and touring bands. Competition for entry-level positions is very strong. Applicants are required to have experience, which can be gained through voluntary work experience in related areas.

Related Jobs

Audiovisual Technician (p 96); Film and Television Camera Operator (p 100); Film and Television Lighting Operator (p 101); Musician (p 108); Sound Technician (p 111); Stage Manager (p 111); Theatre Mechanist (p 113).

Set Designer

Also known as Stage Designer

Set designers research, design and supervise the construction of sets and scenery, costumes and all the visual aids required in stage, film and television productions.

Set designers:

- produce freehand sketches, accurate scale models, plans and working drawings in consultation with the director of the production, the production manager and other creative artists
- design sets and props, taking into consideration budget allocations and the artistic and technical requirements of the director or producer
- supervise qualified tradespeople who construct the sets and direct set assistants on matters relating to design interpretations
- advise on other areas of technical production such as lighting and sound.

Set designers mostly work in large cities where the main centres of entertainment, production, training and development are located. They often work long hours.

Personal Requirements

- Artistic flair
- Able to combine practical and artistic skills
- Good communication skills

Education and Training

To become a set designer you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a set designer by completing a degree in design, visual arts, fine arts, creative arts, technical production or visual communication. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, visual arts and design are normally required. Applicants may also be required to attend an interview and submit a folio of work. Suitable industry experience (paid or voluntary) is also an advantage. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Set designers are employed by theatre and film and television production companies, usually under contract for the duration of a particular production. They may also be self-employed and work on a freelance basis. Success in this field requires outstanding ability and artistic flair. Demand for set designers is linked to the number of films, television programs and stage shows under production at a given time, the level of government and private funding available, as well as popular trends in entertainment.

Related Jobs

Artist (p 95); Stage Manager (p 111); Theatre Mechanist (p 113).

Signmaker

Also known as Signwriter

Signmakers design, paint, manufacture and install signs for displays, buildings, shopping complexes, signboards, boats, vehicles and structures.

Signmakers:

- talk to clients to find out their requirements and provide digital images or miniature colour sketches if required
- select suitable materials for signs such as adhesive vinyls, LEDs and LCDs, timber, plastic, metal or glass
- prepare surfaces (by filling any holes, sanding and cleaning)
- mix oil paint, enamel, plastic paint, poster colour or varnish
- digitally design, sketch or draw letters and images with a template (pattern), paint the background (if required) and paint or print the sign
- create two-dimensional or three-dimensional lettering using router, laser or rotary engraving, as well as graphics using computer-operated machinery
- design custom vehicle art, wall murals, screen prints and gold-leaf work.

Signmakers work both indoors and outdoors, and spend some time on ladders or scaffolding. They may be required to work in confined spaces or use toxic substances.

Personal Requirements

- Interest and ability in drawing and design
- Organisational and analytical skills
- Willing to work at heights
- Good eyesight (may be corrected) and normal colour vision
- Good oral and written communication skills
- Aptitude for working with computers
- Good at working with hands
- Willing to work both indoors and outdoors

Education and Training

To become a signmaker you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Most signmakers are self-employed. Others work for signwriting firms or industrial and commercial firms. Most jobs are in metropolitan areas. Competition for apprenticeship positions is strong. Technological changes and computer-aided production have significantly reduced the workforce.

Related Jobs

Graphic Designer (p 102); Painter and Decorator (p 310).

Sound Technician

Also known as Audio Engineer and Sound Engineer

Sound technicians operate technical equipment to amplify, enhance, record, mix or reproduce sound in support of performing arts. They may also assemble and maintain sound equipment. Sound technicians may work in radio, television and recording studios, or in theatres and other live performance venues. They may also work in wholesale and retail businesses trading in sound reproduction, recording and public address (PA) equipment. In some cases, they specialise in operating or maintaining sound equipment.

Sound technicians:

- determine sound requirements
- set up, test and operate equipment in accordance with the acoustics of the area and select, place and adjust microphones
- monitor audio signals to detect quality deviations or malfunctions
- service, maintain and repair amplifiers, tuners, receivers, digital audio systems, turntables and pick-ups, reel-to-reel and cassette-type tape recorders and speaker systems
- build and install sound systems
- dub and edit tapes or compact discs
- operate controls to maintain correct sound levels
- talk with performers and instruct them on microphone use
- introduce pre-recorded special effects required by scripts.

Sound technicians may be required to work shifts that involve long hours in the evenings and on weekends. They often work under difficult conditions and, when working at outdoor concerts, in variable weather.

Personal Requirements

- A good ear for detail in all areas of sound
- Aptitude for working with computers and audio equipment
- Flexible attitude toward working hours and conditions
- Able to work under pressure

Education and Training

You can work as a sound technician without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have qualifications and you may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a sound technician through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Sound technicians are employed by the Australian Broadcasting Corporation (ABC), commercial radio and television broadcasting stations, film production companies, theatre and live entertainment companies and venues, sound recording studios, and PA equipment and audio reproduction businesses. Some sound technicians work on a freelance basis and may establish their own studios. This is a very competitive occupation and people sometimes need to travel interstate to find work.

Related Jobs

Audiovisual Technician (p 96); Games Developer (p 83); Musician (p 108); Stage Manager (p 111); Theatre Mechanist (p 113).

Stage Manager

Also known as Film and Television Floor Manager

Stage managers plan and coordinate rehearsals and performances, including supervision of the plotting and rehearsal of technical cues, props, stage elements and moving scenery.

Stage managers:

- analyse and interpret the script, plans, models and designs for all relevant technical and production information
- consult with management, designers and the director to determine requirements for rehearsal and performance
- undertake administrative duties, including prioritising tasks and determining production resources such as time, finance, personnel and physical space
- prepare for rehearsals and obtain all required resources, such as props, costumes and settings
- prepare and distribute all necessary rehearsal, production and performance documentation
- prepare the prompt copy, which defines actors' calls and movements, technical cues, stage elements, props and moving scenery, and front-of-house communications
- organise the rehearsal space and process, including final transfer to the venue
- supervise and direct backstage staff and members of the stage management team
- give cues for lights, sound, cast entrances, moving scenery and other performance elements
- ensure production resources are stored safely.

Stage managers work in all types of live performances. They work closely with production departments, venue management, creative teams and performers. Stage managers may be required to travel extensively. They work long hours, including nights and weekends.

Personal Requirements

- Practical and organised
- Artistic flair
- Authority and tact
- Able to work under pressure
- Able to work as part of a team

Education and Training

To become a stage manager you usually need to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you have a degree in stage management, theatre, drama, technical production or performance, in addition to extensive industry experience. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Applicants may be required to attend an interview, audition or workshop. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Stage managers are employed by film, TV and theatre production companies. As with other jobs in the arts industry, employment is generally on a contract basis and runs for the duration of the particular production. The demand for stage managers generally depends on the level of funding available for production. This is a highly competitive field.

Related Jobs

Actor (p 94); Audiovisual Technician (p 96); Film and Television Lighting Operator (p 101); Film, Stage and Television Director (p 102); Set Designer (p 110); Sound Technician (p 111).

Stunt Performer

Also known as Stunt Actor

Stunt performers undertake dangerous or difficult acts for the purpose of entertainment, including replacing film actors in dangerous scenes. They strive to achieve the greatest visual impact with minimum safety risk.

Stunt performers:

- jump from high buildings
- drive cars and motorcycles at fast speeds and crash vehicles
- perform fighting scenes, incorporating martial arts, wrestling or boxing moves
- perform flying or falling stunts with the assistance of ropes, harnesses, parachutes, trampolines and crash mats
- enter flaming buildings or set themselves on fire (using safety procedures)
- perform stunts on horses, boats, trucks and water skis
- perform stunts in and under water involving swimming, diving and a wide range of water sports
- check scripts in regard to safety aspects and provide safety reports
- oversee performers on set and provide advice or help with safety.

Stunt performers carry out acts that look spectacular or appear dangerous, using timing and props to minimise risks. It takes experience and a lot of time to work out a logical procedure for executing stunt work. Stunt work can be physically demanding and may require a lot of time spent in uncomfortable positions or places, such as underwater or underground. Hours can be long and varied (particularly for film work), and early starts and late finishes are common.

Personal Requirements

- Quick reflexes and flexibility
- Good eyesight (may be corrected)
- A sense of timing
- Able to cope with the physical demands of the job
- Responsible attitude towards safety

Education and Training

You can work as a stunt performer without formal qualifications. However, you will need to obtain special grading from the Media, Entertainment and Arts Alliance before working. You must be 18 years of age to apply.

Additional Information

To meet the requirements for Stunt Action Person grading set by the Media, Entertainment and Arts Alliance, stunt performers must have a minimum of six months of recognised general stunt training and be able to demonstrate competency in four out of five categories: Body Control, Heights, Vehicles, Animals (Driving or Riding) or Water. Competency in Body Control is compulsory.

Completion of courses, previous experience or licences may be required to demonstrate competency in a category. A current Provide First Aid Certificate is also required.

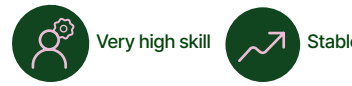
Employment Opportunities

Stunt performers work on contract for film companies, television stations and video production houses. They may also work in a variety of entertainment centres, including circuses, theme parks, shopping centres and showgrounds. Extensive experience is needed to gain the necessary skills. Success is likely to depend on ability and motivation, while demand is determined by the level of investment in the television/film industry and public interest in live performance. With experience and completion of further grading, stunt performers may become safety supervisors or stunt coordinators.

Related Jobs

Actor (p 94); Sportsperson (p 271).

Textile Designer



Textile designers produce ideas and designs for printed, woven or knitted textiles and many patterned surfaces.

Textile designers:

- design and produce original woven, knitted or printed fabrics
- design fashion fabrics for clothing, including jackets, shoes, socks, jeans, hats, bags and lingerie
- design fabrics for homeware items, including chairs, carpets, bed linen and tableware
- design surface patterns for laminates, wallpaper, plastics, tiles, toys and packaging
- make drawings of initial concepts and work with various yarns and fabrics
- make decisions about colour, structure, surface pattern, weight and yarn composition, taking into account the final use of the fabric
- translate designs into marketable fabrics
- use computer-aided design (CAD) systems
- inspect pre-production for colour and quality, and approve these or instruct changes to be made
- produce finished artwork, storyboards and colourways (colour tone work)
- liaise with clients, sales staff, buyers and production team, while working to deadlines
- research and gather information about the target market.

Textile designers work within and alongside industries such as fashion, automotive, interior design and technical textiles. They may also work within a studio environment alongside other designers, or as freelance designers working with a client base.

Personal Requirements

- Enjoy artistic and creative activities
- Good drawing and visualisation skills
- Able to understand and use colour
- Interested in pattern and surface decoration
- Creative and able to translate ideas into product
- Good communication skills
- Good problem-solving skills

Education and Training

To become a textile designer you usually have to complete a VET qualification. Skills can also be gained through a qualification in design studies, which may be applied to textiles generally. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a textile designer by studying textiles or textile design at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and visual arts are normally required. In addition, applicants are usually required to attend an interview and submit a folio of their recent work. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Textile designers are employed in a wide range of design and merchandising positions. They are employed as designers by studios, manufacturers or distributors of printed, woven and knitted fabrics. Some go into business as textile designers and some as producers of fabrics working on individual commissions.

Related Jobs

Artist (p 95); Interior Designer (p 105).

Theatre Mechanist

Also known as Stagehand

Theatre mechanists prepare and put together sets for live performances, theatre, opera, musical concerts and dance performances. Experienced mechanists may be employed as theatre 'flypersons', whose work involves operating the flying systems which control flown scenery.

Theatre mechanists:

- load and unload scenery
- build and set up stage scenery and suspended scenery (or 'flown' scenery)
- determine the best method for storage and setting of scenery in performances
- run the scenery movements in a performance
- operate the mechanical components of the stage including trap doors, lifting equipment and movable scenery
- carry out maintenance and repairs of stage scenery.

Theatre mechanists work as part of a small team. Working hours are irregular and may include long shifts, nights and weekends.

Personal Requirements

- Enjoy manual work
- Able to use a variety of tools
- Able to cope with the physical demands of the job
- Enjoy working with people in a team environment

Education and Training

You can work as a theatre mechanist without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have qualifications and you may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Employment Opportunities

Theatre mechanists are employed by theatres and other performance venues.Occasionally, a producer will employ a head mechanist to tour with a major production. Most employment is casual, although it is usual to be employed for extended periods such as the run of a play. Some major entertainment centres employ permanent mechanists, but these positions are rare.

Opportunities in this very competitive industry are mainly found in the major centres of entertainment production, such as Melbourne and Sydney, or overseas.

Related Jobs

Film and Television Lighting Operator (p 101); Production Crew Member (p 109); Set Designer (p 110); Sound Technician (p 111).

Visual Merchandiser

Also known as Visual Stylist and Window Dresser

Visual merchandisers develop floor plans and three-dimensional displays of goods and services in order to maximise sales and profit. These include window displays, interior point-of-sale displays and special promotions.

Visual merchandisers:

- communicate with managers of department stores to determine the floor layout, traffic flow and display points, as well as what items are to be displayed and how
- design window or internal displays based on a theme, style or trend of promotion
- obtain props and accessories for constructing displays
- make and paint props and signs
- dress mannequins and use appropriate lighting to display merchandise for the best possible presentation
- arrange ticketing and signage
- maintain, store and dismantle displays after promotion periods.

Visual merchandisers may be required to carry equipment and products, climb ladders, unpack stock and work in confined areas. Those employed by large department stores or firms may travel between head office and branches. They may need to work at night and on weekends and public holidays.

Personal Requirements

- Creative flair and imagination
- Good colour sense
- Good drawing and design abilities
- Able to cope with the physical demands of the job

Education and Training

You can work as a visual merchandiser without formal qualifications. Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification in visual merchandising or retail operations. Applicants may be required to submit a portfolio of artwork. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Employment Opportunities

Visual merchandising requires creative talent and an eye for detail. Major employers include department stores, small to large retailers and other businesses such as display and exhibition companies. Some visual merchandisers are self-employed as consultants, freelancers and trainers. Wholesalers sometimes employ visual merchandisers to work with retailers to maximise sales through visual presentation in showrooms, exhibitions and trade shows.

Related Jobs

Fashion Designer (p 99); Graphic Designer (p 102); Interior Decorator (p 105); Interior Designer (p 105); Model Maker (p 107); Painter and Decorator (p 310).

Dentistry

Dentistry is a clinically focused career, requiring good communication skills, a desire to help people, an aptitude for hands-on work and strengths in science and mathematics. It is a competitive field, offering a high-status profession at the end of your study, with considerable scope for specialisation as you gain experience.

Courses and specialisations

Course options include graduate entry programs and pre-dentistry degrees, which once completed, are followed by a postgraduate course before registration. There is little variation in the content and structure, as they must all satisfy similar criteria to be accredited by registration authorities.

Most dentists work in private practice, although there are opportunities for employment in government and the Defence Force. Dentists can also specialise in a number of areas, earning titles such as orthodontist, oral surgeon, periodontist, prosthodontist and forensic odontologist. Becoming a specialist involves several years of experience and usually postgraduate study.

Where to study

The dentistry field remains small but has expanded in recent years, with the introduction of new schools across the country. Institutions offering dentistry courses have their own clinical facilities for practical learning, including fully operational clinics, which are sometimes open to the public. When researching, be sure to check out the quality of facilities on offer.

In addition, all students in their last semester or year should be in placements out in the community.

All courses are hard to get into and are quite long — around seven years. Admission generally requires a high ATAR and good performance in the University Clinical Aptitude Test (UCAT), as well as a range of prerequisite subjects and usually an interview.

Five-star universities

Educational experience		Graduate employment		Learner engagement		Learning resources	
CQUni	78.6%	QUEENSLAND	96.8%	CQUni	88.1%	CQUni	91.7%
JCU	76.0%	JCU	96.4%	ADELAIDE	74.0%	NEWCASTLE	82.1%
National average	58.5%	National average	83.3%	National average	59.5%	National average	70.3%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

2,448
Undergraduate

1,545
Postgraduate

533
International undergraduate

What can I do?

- Dental hygiene
- Dental nursing
- Dental therapy
- Dentistry
- Oral health therapy

Graduate starting salary

$78,300
Undergraduate

$99,000
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

83.3%
Undergraduate

92.2%
Postgraduate

Five-star universities

Median starting salary

JCU	$100,000
LA TROBE	$90,200

National average
$78,300

Skills development

CQUni	95.1%
ADELAIDE	91.1%

National average
80.8%

Student support

CQUni	83.8%
NEWCASTLE	81.8%

National average
62.6%

Teaching quality

ADELAIDE	83.2%
NEWCASTLE	80.7%
CQUni	80.5%

National average
66.6%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Dental Assistant

Also known as Dental Nurse

Dental assistants prepare patients for oral examination and assist other dental workers, such as dentists, dental therapists and dental hygienists, in providing treatment to the teeth, mouth and gums. Dental assistants also carry out reception and administration duties.

Dental assistants:

- receive patients and prepare them for necessary dental procedures
- prepare surgery for dental treatment with correct instruments/materials for use as directed by the operator
- record findings from oral examinations
- provide instruments and dispense materials during oral examinations or treatments, as directed by the operator
- provide pre- and post-operative instructions for patients undergoing general or local anaesthesia
- clear the patient's mouth of saliva or dental materials used in the treatment by operating handheld suction or air and water-spraying equipment
- clean and sterilise instruments used after treatment
- clean and tidy the surgery, and implement standard decontamination procedures for infection control
- process, mount and file dental X-rays
- perform routine care and maintenance of dental equipment and instruments
- make appointments for patients, keep records of patients' treatments and send out reminders for re-examinations
- prepare accounts and collect payments.

Dental assistants may work with just one person, or as part of a team. They may have to work under pressure as most treatments have to be completed in a minimum amount of time.

Personal Requirements

- Good with hands
- Able to concentrate and follow instructions
- Good communication and interpersonal skills
- Good organisational and time management skills
- Interested in healthcare work.

Education and Training

To become a dental assistant, you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a dental assistant through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Dental assistants can undergo further training to allow them to take dental radiographs, perform technical procedures or to work in oral health promotion. You may be required to provide evidence of relevant immunisations as a condition of your studies or to work in a dental clinic. You may also need to obtain a National Police Certificate and a Working with Children Check.

Employment Opportunities

Most dental assistants are employed by dentists in private practices or in public clinics. Some dental assistants undertake further study to become dental hygienists. Others gain further administrative experience and qualifications to progress to practice management.

Dental Hygienist

Dental hygienists use preventive, educational and therapeutic methods for controlling oral diseases to help individual patients and groups achieve and maintain oral health.

Dental hygienists:

- assess and record oral health conditions and plan treatments
- educate, counsel and provide instruction for people of all ages, as well as other healthcare professionals, on oral health and hygiene, plaque control and nutrition
- remove deposits and stains from teeth by scaling, root debridement and tooth polishing
- identify and apply prevention strategies and control mechanisms for dental caries (decay) and periodontal (gum) disease
- select and use appropriate fluoride treatments, and polish tooth restorations
- apply professional tooth whitening agents
- place temporary dental restorations
- expose, process and interpret dental X-rays
- take impressions of patients' mouths for the construction of study casts, mouthguards and orthodontic appliances
- carry out orthodontic procedures that do not initiate tooth movement (such as band sizing and selection or bonding of fixed retainers)
- apply and remove periodontal dressings and rubber dams
- stabilise teeth affected by gum disease
- select and administer pain control techniques, including local anaesthesia
- remove dental sutures (stitches)
- instruct patients on looking after their teeth and mouth after operations.

Dental hygienists may work in a team with other dental practitioners.

Personal Requirements

- Good hand-eye coordination
- Able to perform precise and detailed work
- Good problem-solving skills
- Good communication skills
- Interest in healthcare work
- Able to work as part of a team

Education and Training

To become a dental hygienist you usually have to complete a VET qualification in oral health (dental hygiene) or a degree in oral health or oral health therapy approved by the Dental Board of Australia. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Applicants may also be required to attend an interview. Institutions have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, Provide First Aid Certificate and Working with Children Check, and fulfill immunisation requirements. Contact the institutions you are interested in for more information. It is a legal requirement for

graduates to be registered with the Dental Board of Australia before practising as a dental hygienist in any state or territory in Australia. For full details, see the board's website. The Dental Hygienists' Association of Australia is a professional association that represents dental hygienists at a national level. Visit their website for more information.

Employment Opportunities

Dental hygienists mainly work with other dental professionals in private dental practices. There are some opportunities in community health centres, schools, childcare centres, aged-care facilities, dental hospitals, regional clinics and supported residential facilities. There are limited training places available and competition is strong.

Related Jobs

Dental Technician (p 117); Dentist (p 117); Oral Health Therapist (p 119).

Dental Technician

Dental technicians construct and repair dentures (false teeth) and other dental appliances, including crowns, bridges and orthodontic appliances.

Dental technicians:

- make models of the mouth and teeth from impressions of the patient's mouth (taken by the dental prosthetist, dentist, dental hygienist or dental therapist)
- use models and moulds to make dental restorations such as inlays, onlays, veneers, crowns and bridges
- polish and finish the appliance prior to placement in the patient's mouth
- make appliances for patients with cleft palates, braces and plates for correcting irregular teeth
- make mouthguards.

Dental technicians work in dental laboratories on their own or in small groups. They use a wide range of materials and techniques in their work, including plaster casting, electro-spot welding, metal casting, metal polishing, wax modelling, ceramics, wire bending, electroplating and sandblasting. The use of small CAD/CAM (computer-aided design/manufacturing) units is increasing in the design and manufacture of some dental products. Dental technicians work closely with dentists and dental prosthetists and usually have no direct contact with patients.

Dental technology may be divided into the following categories:

- General prostheses: the largest field in dental technology, in which partial or full dentures (metal and non-metal) are constructed to replace the partial or total loss of natural teeth.
- Crown and bridge: used in the restoration of teeth and fixtures in the patient's mouth.
- Maxillo-facial: prostheses are made to replace missing facial and body tissues due to injury, disease or developmental abnormality.
- Orthodontics: the manufacture of fixed or removable appliances for the correction of dental irregularities in the mouths of patients.

Specialisations

- Dental Prosthetist

Personal Requirements

- Good communication skills
- Good hand-eye coordination
- Able to do precise and detailed work
- An eye for form and design
- Able to concentrate for long periods

Education and Training

To become a dental technician you usually have to complete a VET qualification in dental technology. Entry may require employment in a dental laboratory for technical and work training. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information. You can also become a dental technician through an apprenticeship or traineeship in Dental Technology. Entry requirements may vary, but employers generally require Year 10.

Alternatively, you can become a dental technician by studying dental technology at university. Entry usually requires you to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, biology, chemistry, mathematics and physics are normally required.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.

Employment Opportunities

Dental technicians may work independently in hospitals or dental laboratories, or for dental group practices.

Related Jobs

Dental Hygienist (p 116); Dentist (p 117); Oral Health Therapist (p 119).

Dentist

Dentists diagnose and treat oral diseases, injuries and abnormalities of jaws, teeth and gums, undertake preventive procedures, conduct surgery and perform other specialist techniques.

Dentists:

- examine patients' teeth and gums using dental equipment and X-rays
- diagnose dental conditions and plan oral health care in consultation with patients
- clean teeth and cavities, and provide preventive care such as scaling, cleaning and fluoride therapy
- repair decayed and broken teeth by rebuilding tooth structures and providing crowns and bridges
- treat diseases of the roots, gums and soft tissues of the mouth
- perform routine surgical procedures, such as extracting teeth, as well as complex operations on the jaws and soft tissues
- give local anaesthetics when necessary for carrying out treatment, and prescribe other medicines for infection or pain
- design and fit dentures, crowns and bridges for the replacement of lost or unsound teeth
- refer patients to dental specialists for further treatment.

Specialisations

- Endodontist
- Paediatric Dentist

- Periodontist
- Prosthodontist
- Public Health Dentist
- Special Needs Dentist

Personal Requirements

- Good hand-eye coordination
- Able to do precise and detailed work
- Good communication skills
- Able to concentrate for long periods
- Sympathetic and caring

Education and Training

To become a dentist you usually have to complete a degree in dentistry, dental science or dental surgery at university. Alternatively, you can complete a degree in a related field followed by a postgraduate qualification in dentistry, dental surgery or dental medicine. To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Entry is highly competitive, and you usually need to sit the University Clinical Aptitude Test for Australia and New Zealand (UCAT ANZ) and a structured interview. and attend a structured interview. You may also be required to complete a structured oral assessment. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree and may require completion of the Graduate Australian Medical School Admissions Test (GAMSAT). Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Students may also be required to be tested for blood-borne transmissible viruses (such as hepatitis B and HIV). Contact the institutions you are interested in for more information. It is a legal requirement for graduates to be registered with the Dental Board of Australia before being able to practise as a dentist in any state or territory in Australia. For full details, see the board's website.

Employment Opportunities

Most dentists work in private practice. Some are also employed within state or territory governments. Opportunities for careers in teaching and research also exist, mainly within universities and dental training institutions. Demand for dental services depends upon demographic factors such as the size and age of the population, the general economic climate, the extent of private health cover and public awareness of new services available. Demand for dentists in the public sector depends upon government funding policies.

Related Jobs

Dental Technician (p 117); Medical Practitioner (p 202); Oral Health Therapist (p 119); Oral and Maxillofacial Surgeon (p 118); Orthodontist (p 119).

Oral and Maxillofacial Surgeon

Oral and maxillofacial surgeons conduct surgery and relevant procedures to prevent disease and infection in the mouth region. They normally work within a dental practice or medical institution and those working in a 24-hour capacity may be on call.

The following types of surgery are performed by oral maxillofacial surgeons:

- Preprosthetic surgery (bone augmentation)
- Oral and dentoalveolar surgery for the removal of impacted and buried teeth, cysts
- Dental implant surgery and bone grafting, to replace missing teeth or stabilize dentures; rehabilitation of patients having undergone surgery for tumors, to retain facial prostheses
- Orthognathic surgery for dentofacial deformities
- Facial trauma surgery for facial bone fractures and related soft tissue injuries
- Reconstructive surgery of the face
- Cleft lip and palate surgery
- Congenital craniofacial deformities
- Facial plastic surgery such as rhinoplasty, rhytidectomy, blepharoplasty, facial implants
- Temporomandibular Joint Disorder (TMJD)
- Snoring and sleep apnea correction surgery
- Tumour and cancer surgery

Oral maxillofacial surgeons frequently work alongside other specialists such as orthodontists, prosthodontists, radiologists, pathologists, oncologists, ENT surgeons, neurosurgeons and plastic surgeons. Oral maxillofacial surgeons mostly work in clinical practice either in major public hospitals, private practice, or both.

Personal Requirements

- Excellent hand-eye coordination
- Friendly, reassuring demeanour
- Able to do precise and detailed work
- Good communication skills
- Able to concentrate for long periods
- Sympathetic and caring

Education and Training

To become an Oral and Maxillofacial Surgeon you need to complete 11 years of training, which includes a four-year training programme with Royal Australasian College of Dental Surgeons; a degree in medicine or dentistry; registration as a dentist and medical practitioner in Australia or New Zealand; and a full year of Surgery in General (SIG).

A Senior Secondary Certificate of Education with very good results would normally be needed to gain entry into a medicine or dentistry degree, and prerequisite subjects in English, mathematics, chemistry and physics are traditionally essential.

Additional Information

In order to take part in required work placements, students will need to obtain a National Police Check, a Provide First Aid Certificate and a Working with Children Check. Testing for blood-borne diseases such as Hepatitis B and HIV may also be conducted.

Employment Opportunities

Oral and maxillofacial surgeons tend to work in private practice, though some are employed in the government sector. Teaching positions are available predominately through universities and dental training institutions.

Related Jobs

Dental Technician (p 117); Dentist (p 117); Oral Health Therapist (p 119); Orthodontist (p 119).

Oral Health Therapist

Oral health therapists diagnose dental decay and gum diseases, work together with dentists to provide routine oral health care for children and adults, and also help to promote oral health and preventive dental practices among school children and the broader community.

Oral health therapists:

- educate and motivate people to maintain good oral health
- promote oral health in the community by providing relevant education and information, and working with other health services and groups such as parents' groups, play groups and parents and citizens' associations, residential care settings and schools
- work to improve oral health within child care and elderly residential care and other health support settings, especially those that cater to people who do not have access to dental care
- provide routine dental treatment for people of all ages, including dental examinations and diagnosis, cleaning, scaling and polishing teeth, filling cavities and extracting deciduous (baby) teeth under local anaesthetic
- treat people of all ages for gum conditions, take X-rays of teeth and jaws, apply sealants and fluoride therapy, and take impressions for mouthguard construction
- bring more complex dental problems to the attention of dentists
- liaise with other healthcare providers to support oral health as part of general health.

Oral health therapists who work in the public sector may be required to work anywhere in their state or territory, although individual preferences and applications for specific positions are taken into account.

Personal Requirements

- Interested in health and wellbeing
- Good hand-eye coordination
- Able to do precise and detailed work
- Good communication skills
- Able to establish rapport with both children and adults
- Able to work as part of a team

Education and Training

To become an oral health therapist you usually have to study oral health at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Entry is highly competitive and there may be a strict quota. You may also need to sit selection assessments and attend an interview before acceptance into the course. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Students may also be required to be tested for blood-borne transmissible viruses (such as hepatitis B and HIV).

Contact the institutions you are interested in for more information.

It is a legal requirement for graduates to be registered with the Dental Board of Australia before practising as an oral health therapist in any state or territory in Australia.

Employment Opportunities

Oral health therapists may be employed by any clinic that provides dental services to the public, in both the private sector (general and specialist practices) and the public sector (school and community dental services, hospitals, and disability and residential care settings). Government dental services are the major employers of oral health therapists, although therapists may also own their own practices.

Opportunities for career progression include positions in research and teaching, and senior clinical and administrative positions coordinating health promotion activities in dental health services state- or territory-wide.

Orthodontist

Orthodontists specialise in correcting misalignments of the teeth and jaw. They provide non-surgical treatments to alleviating a number of problems, including speech defects, chewing difficulties and poor oral hygiene.

An orthodontist:

- examine patients' teeth and jaws using dental equipment and X-rays
- diagnose and treat facial and dental irregularities
- fit and maintain dental braces to fix irregular alignments of teeth
- design headgear and facemasks to facilitate more effective braces.

Orthodontists spend most of their time in an office environment, either standing or sitting whilst interacting with patients.

Personal Requirements

- Good hand-eye coordination
- Able to do precise and detailed work
- Good communication skills
- Able to concentrate for long periods
- Enjoy working with people
- Sympathetic and caring

Education and Training

Orthodontics is a specialisation of general dentistry and requires three years of postgraduate study. The prerequisites are an AHPRA-registered general dental degree and a minimum of two years' clinical experience as a dentist. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and undergo immunisations and a Working with Children Check. Students may also be required to be tested for blood-borne transmissible viruses (such as hepatitis B and HIV).

Employment Opportunities

Orthodontists are mostly employed in private practices, or they run their own. Some hospitals also employ orthodontists. The demand for orthodontic services depends on demographic factors, such as the size and age of the population, the general economic climate, the extent of private health cover and public awareness of new services available. Demand for dentists in the public sector depends upon government funding policies.

Education & training

Teaching can be very rewarding, but it's also incredibly challenging. While teachers benefit from frequent breaks, they spend much of that time recharging, preparing class plans and writing reports. This industry is best suited to those who would enjoy spending a lot of time working with children and young adults.

Courses and specialisations

Most courses lead into an area of school teaching that focuses on either a particular group of students (such as early childhood, primary or secondary), a particular subject or a particular aspect of teaching (such as librarianship or special education).

The best courses in the education field offer an engaging general education, looking at everything from philosophical issues to school structures, including education systems in other countries.

Classroom teaching is not the only long-term career option — some move into a different role (such as a school principal, career adviser or university lecturer), while others move into educational publishing or government departments.

Where to study

Education is one of the biggest fields of study — you can study it at almost any university in the country. When considering a course, make sure that it meets the practical and subject requirements for registration in the state you wish to work in.

Some institutions do a good job of preparing students for the practical realities of the classroom, while others are more theoretical. Practical placements should exist, and adequate administrative support should be provided to obtain them.

Five-star universities

Educational experience

AVONDALE	90.0%
SWINBURNE	87.9%
ECU	86.9%
SUNSHINE COAST	82.5%
UNE	81.1%
NOTRE DAME	80.8%
CQUni	79.7%

National average
76.7%

Graduate employment

QUEENSLAND	94.2%
UTS	93.5%
CQUni	91.8%
QUT	90.1%
WOLLONGONG	90.1%
SYDNEY	89.7%
CANBERRA	88.8%
UNE	88.8%
CSU	88.6%

National average
82.1%

Learner engagement

AVONDALE	73.0%
SYDNEY	70.5%
SUNSHINE COAST	69.1%
FLINDERS	68.3%
NOTRE DAME	67.7%
ECU	67.4%
QUT	65.3%
VU	65.3%
ACU	65.2%

National average
49.3%

Learning resources

ECU	87.7%
QUT	86.9%
QUEENSLAND	86.2%
SUNSHINE COAST	86.0%
SWINBURNE	85.8%
UniSQ	85.5%
FEDERATION	85.1%
MONASH	85.0%
WOLLONGONG	84.8%
FLINDERS	84.6%
DEAKIN	84.5%

National average
81%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

5,310
Undergraduate

53,088
Postgraduate

3,987
International undergraduate

What can I do?

- Secondary school teaching
- Community education
- Coaching
- University teaching
- Primary school teaching
- Early learning education

Graduate starting salary

$64,600
Undergraduate

$67,000
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

82.1%
Undergraduate

87.5%
Postgraduate

Five-star universities

Median starting salary

GRIFFITH	$69,900
QUEENSLAND	$69,900
SUNSHINE COAST	$69,800
CQUni	$69,200
JCU	$69,200
QUT	$68,800
CANBERRA	$68,500

National average
$64,600

Skills development

ECU	89.1%
SUNSHINE COAST	89.0%
SWINBURNE	87.8%
AVONDALE	88.4%
NOTRE DAME	86.7%
SYDNEY	86.3%
VU	84.1%
QUT	83.8%
UniSA	83.6%

National average
81.8%

Student support

SWINBURNE	86.4%
AVONDALE	85.9%
WESTERN SYDNEY	80.8%
ECU	80.6%
SUNSHINE COAST	79.5%
UniSQ	79.4%
GRIFFITH	78.5%

National average
73.3%

Teaching quality

AVONDALE	91.8%
SWINBURNE	89.5%
ECU	87.9%
NOTRE DAME	85.5%
UNE	84.6%
SUNSHINE COAST	84.5%
UniSQ	83.8%

National average
80.4%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Career Development Practitioner

Also known as Career Adviser and Career Counsellor

Career development practitioners help people of all ages to manage learning and work throughout their life. They provide information, advice and assistance relating to a wide range of matters, such as career planning and management, personal development and looking for work.

Career development practitioners:

- use various assessment tools to help people identify their interests, skills, aptitudes and abilities, as well as work and lifestyle preferences, and relate them to the world of work
- counsel individuals on education and career options
- develop and deliver career education and work training programs
- help students find work experience placements
- help clients with jobseeking strategies, writing résumés and applications, and developing interview skills and career portfolios
- assist clients to market their capabilities to potential employers
- assist clients to balance work with family needs
- help clients to navigate career transitions
- provide an information and referral service on education, training and employment opportunities
- consult with teachers, community groups, government agencies, businesses and medical practitioners
- prepare reports and maintain client records
- undertake research in areas relevant to their professional roles.

Career development practitioners may deliver a service to clients in conjunction with other professionals working in allied fields. They may consult with other agencies, accepting and passing on referrals where necessary.

Personal Requirements

- Able to motivate and inspire people
- Able to relate to a wide range of client groups
- Good communication skills
- Aptitude for counselling

Education and Training

To become a career development practitioner you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information. Entry to this occupation may be improved if you have a degree in an area such as education, human resource management or psychology, followed by a postgraduate qualification in career development. To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

To work in schools, you must obtain a Working with Children Check. A National Police Check may also be required.

Employment Opportunities

Career development practitioners may work with students in schools and other educational institutions, with staff in industry or with the general public in private practice. Career development practitioners are employed by state and territory education authorities, independent schools and colleges, and other educational or training organisations. There are limited openings and competition for available places is strong.

Related Jobs

Counsellor (p 170); Human Resources Officer (p 59); Teacher - Secondary (p 129); Teacher - Special Education (p 130); Training Officer (p 131).

Early Childhood Educator

Also known as Child Care Aide , Child Care Assistant , Child Care Worker and Creche Attendant

Early childhood educators care for the social, emotional, physical and educational needs of infants and young children in various care settings.

Early childhood educators:

- plan and implement developmental programs based on observation of individual children
- observe and record children's growth, behaviour and development, and discuss these with parents
- integrate children with special needs into the program, modifying the program and the physical environment if necessary
- supervise and train staff
- prepare play and learning materials and set up the children's environment
- supervise children's play, ensuring their physical safety at all times
- help children with daily routines such as toileting, dressing, eating and sleeping
- guide children's behaviour and social development
- prepare light snacks and meals
- maintain a safe, clean and appealing environment
- perform basic first aid in emergencies.

Early childhood educators' duties and hours of work vary. Shiftwork is often required. Early childhood educators often share basic tasks and work in teams. They spend long periods on their feet and often have to lift and carry children and move equipment.

Personal Requirements

- Alert, observant and active
- Able to use judgment and initiative
- Willing to accept responsibility
- Able to work as part of a team
- Able to relate well to children and their parents
- Patient
- Able to lift children and equipment

Education and Training

To become an early childhood educator you usually have to complete a VET qualification. Applicants may be required to attend an interview. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become an early childhood educator through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

To work in child care, you need to obtain a Working with Children Check or undergo a related assessment. A National Police Certificate may also be required. Contact the institutions you are interested in for more information. You must also hold an approved Provide First Aid Certificate and have completed training in anaphylaxis management and emergency asthma management. Contact the Australian Children's Education and Care Quality Authority for more information.

Employment Opportunities

Early childhood educators are employed in private, government and community-based childcare centres, kindergartens and creches. They may also work in hospitals, women's shelters and neighbourhood houses. Experienced, fully qualified early childhood educators may progress to coordinate or manage a licensed childcare centre. While this is a growing occupation, it is also very popular and competition for jobs may be strong. Self-employment prospects exist by becoming a registered family day care provider in your own home. see the separate entry for Family Day Care Educator.

Related Jobs

Education Aide (p 123); Family Day Care Educator (p 123); Nanny (p 309); Teacher - Primary (p 128); Youth Worker (p 251).

Education Aide

Also known as Teacher's Aide , Education Support Staff , Teacher Assistant , Education Assistant and School Learning Support Officer

Education aides assist teachers with the supervision and support of students and the delivery of learning programmes. They also provide support and assistance to students with special needs, including those with physical or intellectual disabilities, or behavioural issues.

Education aides:

- assist and participate in activities that improve the physical, social, emotional and intellectual development of children in schools and preschool centres
- prepare indoor or outdoor areas for learning or recreational activities
- assist children with intellectual, physical and behavioural difficulties with their academic studies
- assist students with physical challenges by lifting, positioning and exercising, and transferring them to or from transportation
- assist with personal hygiene, toileting and feeding requirements as required by each individual student
- undertake specific therapy tasks with individual students under the guidance of the teacher or nominated professional
- assist students with intellectual disabilities with the use of learning aids
- assist children individually to learn social skills
- assist with the preparation of teaching materials, copying and collating written or printed material
- distribute and collect lesson material.

Specialisations

- Aboriginal/Torres Strait Islander Education Worker
- Education Aide - Auslan
- Education Aide - Braille

Personal Requirements

- Good communication skills
- Patient in dealing with people
- Mature and sensible
- Able to work independently or as part of a team
- Enjoy helping children learn
- Able to accept direction and supervision

Education and Training

You can work as an education aide without formal qualifications, but employers usually require Year 10. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. Some courses provide training in specific education areas such as science, food or information technology. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Additional Information

Before undertaking practical placements required by courses, students will need to obtain a Working with Children Check. A National Police Certificate may also be required. Contact the institutions you are interested in for more information.

Employment Opportunities

Education aides are employed in primary and secondary schools and colleges. The hiring of support staff is usually done by the school's principal. Jobs may be full time or part time.

Contact the Department of Education in your state or territory for more information.

Related Jobs

Early Childhood Educator (p 122); Librarian (p 188); Teacher - Physical Education (p 127); Teacher - Primary (p 128); Teacher - Secondary (p 129).

Family Day Care Educator

Family day care educators provide education and care for babies and children in the family day care educator's own home under local government, community-based or privately operated management schemes.

Family day care educators:

- provide a range of activities and experiences that are designed to promote physical, social, emotional and intellectual development for each child
- supervise the activities of children in their care, ensuring their physical safety at all times
- support and guide children's behaviour using positive strategies
- maintain a safe, clean and appealing environment for children
- ensure meals and snacks provided for children are varied and nutritionally adequate
- take children to and from school or preschool
- perform first aid in emergencies
- maintain records of children's development within identified learning outcomes

- provide feedback to parents about their child's day
- maintain accurate attendance records
- maintain a register of emergency telephone numbers such as those of parents, doctors, police, ambulance and the fire brigade
- maintain a daily record of accidents, illnesses and the administration of medicine in accordance with requirements.

Personal Requirements

- Enjoy working with children
- Able to relate well to children and their parents
- Able to work independently and as part of a team
- Able to use judgment to prioritise tasks
- Able to cope with the physical demands of the job
- 18 years of age or older

Education and Training

To become a family day care educator you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a family day care educator through a traineeship in Early Childhood Education and Care or School Age Education and Care. Entry requirements may vary, but employers generally require Year 10.

Additional Information

To work as a family day care educator, you will need to obtain a Working with Children Check. Contact the institutions you are interested in for more information.

You must also hold a Provide First Aid Certificate and have completed training in anaphylaxis management and emergency asthma management. Contact the Australian Children's Education and Care Quality Authority for more information.

Employment Opportunities

Family day care educators may work during standard business hours, before and after school, during school holidays and sometimes overnight or on weekends.

Many family day care educators are self-employed, operating from their own home.

Related Jobs

Nanny (p 309).

Recreation Officer

Recreation officers develop, support and coordinate sport and recreation programmes and services for the benefit of the community. Recreation officers may work at one of three levels: professional, technical or operative.

• Professional officers work as planners, researchers, consultants, educators and administrators.

• A technical officer's work may involve managing a leisure centre, community centre or sports complex.

• Recreation officers work at the operative level as youth leaders and outdoor activity leaders.

The three levels are not always clearly defined. The relevant responsibilities will vary considerably between different organisations and may overlap.

Recreation officers:

- initiate, organise and coordinate local sport and recreation events and services such as community functions, sporting competitions, hobby classes, school holiday programs and cultural activities
- develop and administer recreation policy
- plan and promote recreation activities and events
- prepare and administer financial estimates, budgets and resource allocations
- coordinate and arrange meetings and venues
- recruit, train and supervise recreation leaders
- liaise with parents, schools, local sporting organisations, church leaders, social workers, community groups and individuals about programs and facilities
- write proposals, evaluations and correspondence.

Most recreation officers have a high level of contact with the public.

Recreation officers may work at one of three levels: professional, technical or operative. Professional officers work as planners, researchers, consultants, educators and administrators. A technical officer's work may involve managing a leisure centre, community centre or sports complex. Recreation officers work at the operative level as youth leaders and outdoor activity leaders. The three levels are not always clearly defined. The relevant responsibilities will vary considerably between different organisations and may overlap.

Personal Requirements

- Enjoy outdoor activities
- Good communication and negotiation skills
- Good administration and organisational skills
- Able to lead, motivate and supervise other people
- Good sport skills and expertise in a specific area such as swimming or outdoor recreation

Education and Training

To become a recreation officer you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a recreation officer through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Entry to this occupation may be improved if you complete a degree in exercise and sports science, sport development, sport and recreation management, human movement and health studies, exercise science or physical activity studies. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry or physics are usually required. A number of universities in Australia offer degrees in these areas. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

A Provide First Aid Certificate is usually required.

Employment Opportunities

Recreation officers manage and coordinate a variety of organisations, programs, events, services and facilities. They may be employed by government authorities, community organisations, schools, commercial organisations (such as health and fitness agencies), outdoor recreation organisations and sports associations. Leisure management is a growing area, and people with management or marketing qualifications are sought after.

Related Jobs

Fitness Instructor (p 263); Lifeguard (p 267); Sports Administrator (p 269); Sports Coach (p 270); Teacher - Physical Education (p 127).

Teacher – Art

Art teachers in secondary schools teach students the practical skills, theory and history of art. Students receive tuition in aspects such as painting, drawing, printmaking, photography, sculpture and ceramics. Art teachers may specialise in one or more aspects of art in their tertiary studies (such as history and appreciation of art, ceramics, drawing, film and video, painting, pottery, printmaking, sculpture and visual communication), as well as studying the elements of design, graphics, product design and environmental studies.

Art teachers in secondary schools:

- undertake general teaching tasks (see the separate entry for Teacher - Secondary)
- set up and maintain facilities such as photographic darkrooms, kilns for ceramic work, studios and storage areas
- order and maintain art resources and materials within the budget allowance
- demonstrate the use of art materials and tools such as oils, watercolours, palettes and palette knives, brushes, pens, pencils, dyes, clay, fabric, canvas and paper
- inspire students and assist them to develop their creativity and self-expression through various art forms and media
- arrange for exhibitions of student work in and out of school.

Personal Requirements

- Artistic talent
- Enjoy creative work
- Enthusiastic, patient and tactful
- Good communication skills
- A commitment to ongoing professional development
- Creativity
- Good organisational skills
- Enjoy teaching and working with young people
- Prepared to work outside of school hours

Education and Training

To become an art teacher you usually need to complete a four-year integrated course or double degree in which the subject area and teaching components are taught throughout (a Bachelor of Education with a major in creative, graphic or visual arts, for example). Alternatively, you can complete a degree with a major in creative, graphic or visual arts, followed by a postgraduate qualification in education such as a Graduate Diploma of Education. To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, visual arts and design are normally required. Applicants may also be required to submit a portfolio and attend an interview. Institutions have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking practical placements required by courses, students will need to obtain a Working with Children Check. A National Police Certificate may also be required. Contact the institutions you are interested in for more information.

You will need to register with the teaching board in your state or territory. Teachers are required by mandatory reporting laws to report suspected cases of child abuse or neglect.

Employment Opportunities

Art teachers are employed in both government and non-government schools, generally at secondary level. Graduate employment prospects are better for those who are willing to work in non-metropolitan areas.

Related Jobs

Artist (p 95); Craftsperson (p 98); Teacher - Music (p 127); Teacher - Primary (p 128).

Teacher – Early Childhood

Also known as Pre-primary School Teacher , Kindergarten Teacher and Teacher - Pre-School

Early childhood teachers plan and conduct education programmes for young children.

Early childhood teachers:

- plan activities using a variety of materials and equipment to develop good coordination, social skills, creativity, self-expression and an interest in learning
- promote language development and self-confidence through storytelling, drama, music and discussions
- help to organise and participate in excursions to enhance learning experiences
- encourage children to question and explore the world in which they live
- observe children to evaluate and record their progress and to detect signs of developmental disorders, ill health or emotional disturbance
- recommend appropriate programs for further development
- work with guidance officers, speech pathologists and psychologists to assist children with special needs
- help integrate children with special needs into mainstream classes
- promote health and safety concepts and social interaction with other children
- promote awareness and appreciation of diversity in multicultural societies
- attend to sick children and those in need of first aid
- comfort children who are hurt or distressed
- assist children with their toileting and personal hygiene
- discuss aspects of children's development with parents and other educators
- discuss the aims of the education program with parents
- participate in community activities and parent/staff committees
- supervise and work with student teachers and trainee childcare workers.

Early childhood teachers work in government-owned pre-school centres, early education classes, community kindergartens and community childcare centres.

Personal Requirements

- Able to relate to children and their families
- A keen desire to teach children
- Willing to learn

- Good problem-solving skills
- Sound literacy and numeracy skills
- High-level planning and organisational skills
- Enthusiastic, tactful, patient and a sense of humour
- Prepared to work outside of school hours

Education and Training

To become an early childhood teacher you usually have to complete a degree in education, with a major in early childhood. Alternatively, you can complete a bachelor degree in a related area, followed by a postgraduate qualification in education, specialising in early childhood. To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking practical placements required by courses, students will need to obtain a Working with Children Check. A National Police Certificate may also be required. Contact the institutions you are interested in for more information.

You will need to register with the teaching board in your state or territory. Teachers are required by mandatory reporting laws to report suspected cases of child abuse or neglect. You may also be required to hold an approved Provide First Aid Certificate and have completed training in anaphylaxis management and emergency asthma management. Contact the Australian Children's Education and Care Quality Authority for more information.

Employment Opportunities

Early childhood teachers are employed in education and care services for children aged 0-8 years by state and territory education departments, government and non-government schools or childcare centres. They may work in metropolitan or remote areas, or Aboriginal communities.

Self-employment opportunities exist as the proprietor of a private preschool or childcare centre. Other opportunities may be available as home tutors.

Related Jobs

Art Therapist (p 94); Early Childhood Educator (p 122); Nanny (p 309); Psychologist (p 220); Welfare Worker (p 250).

Teacher – English as a Second Language

Teachers of English as a Second Language (ESL) teach, and assist other teachers to teach, students whose first language or dialect is not Standard Australian English to become proficient with the English language.

ESL teachers:

- teach students basic or advanced English language skills
- teach students individually and in small groups outside of the regular classroom, or assist students within normal classroom settings
- diagnose and assess English language competency in students whose first language is a language other than English
- provide assistance to regular classroom teachers by designing special teaching programs for students with English language difficulties
- provide advice concerning the community services available to assist students with English language difficulties.

Personal Requirements

- An understanding and acceptance of cultural differences
- An excellent grasp of English language structure
- Able to identify the needs of individual students
- Very good communication skills
- Excellent organisational skills
- Prepared to work outside of school hours
- Patient when dealing with students of differing abilities and cultures

Education and Training

To become an ESL teacher you usually have to complete a degree in primary or secondary education with a major in ESL. Alternatively, you can undertake a postgraduate qualification, such as a Graduate Diploma of Education specialising in teaching ESL, after completing a degree in teaching, education or another relevant area (a Bachelor of Arts majoring in English, for example).

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information. For further details, visit www.gooduniversitiesguide.com.au.

Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Contact the institutions you are interested in for more information.

ESL teachers in Vocational Education and Training (VET) institutions require experience in designing and delivering Teaching English to Speakers of Other Languages (TESOL) programs to adults. A VET qualification may also be required to teach at a VET institution.

Additional Information

Before undertaking practical placements required by courses, students will need to obtain a Working with Children Check. A National Police Certificate may also be required.

You will need to register with the teaching board in your state or territory.

Teachers are required by mandatory reporting laws to report suspected cases of child abuse or neglect.

Employment Opportunities

ESL teachers work for adult community education organisations, VET institutes, universities, private language schools and government-funded agencies. They also work in primary and secondary schools. The demand for ESL teachers is affected by migrant intake levels and government policy on migrants entering Australia.

Related Jobs

Interpreter (p 188); Teacher - Primary (p 128); Teacher - Secondary (p 129); Translator (p 191); Welfare Worker (p 250).

Teacher – Music

Music teachers develop students' interest in and appreciation of music through teaching theory, history and practical skills.

Music teachers:

- illustrate basic musical concepts (timing and rhythm, for example) for students through activities such as playing recorded music or playing an instrument in class accompanied by students
- design creative activities to allow students to experience different musical styles, interpret musical scores and compose their own music
- teach music theory and history, including principles of harmony, counterpoint, form and analysis
- provide aural training through the performance of music, talks and discussion, use of audiovisual equipment, practical music and written assignments
- introduce individual students to particular instruments and assess students' needs in regard to instrumental training
- set up and conduct school choirs and orchestras, concert bands, rock bands and jazz ensembles
- organise student concerts and invite visiting musicians to schools for concerts and performance classes.

Personal Requirements

- High degree of proficiency in at least one instrument
- Enthusiasm for music and teaching
- Good organisational skills
- Able to communicate musical concepts and instructions clearly
- Patient when dealing with students of differing abilities
- Prepared to work outside of school hours

Education and Training

To become a music teacher you usually have to complete a degree in education, specialising in music or performing arts. Alternatively, you can undertake a music degree or an arts degree majoring in music, followed by a postgraduate qualification in education or teaching.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education and have AMEB qualifications. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics and music are normally required. Applicants may also be required to submit a folio, attend an audition or interview, or complete a music theory proficiency test. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. A number of universities in Australia offer postgraduate courses in education and teaching. They may be available by distance education. Contact the institutions you are interested in for more information.

No formal qualifications are required to be a private music teacher, but they may be an advantage.

Additional Information

Before undertaking practical placements required by courses, students will need to obtain a Working with Children Check. A National Police Certificate may also be required. Contact the institutions you are interested in for more information.

You will need to register with the teaching board in your state or territory.

Teachers are required by mandatory reporting laws to report suspected cases of child abuse or neglect.

Some people who have reached a certain level of musical competence set themselves up as private music teachers, even if they have not completed a training course.

Employment Opportunities

Employment opportunities for school-based teachers may arise in government and non-government schools, and overseas. Demand for this occupation is mainly dependent on government funding, as well as teacher resignation and retirement rates. Opportunities may be enhanced for teachers willing to work in remote or rural locations.

Opportunities for private music teachers depend on the ability of families to pay the fees and teachers' ability to promote their services.

Music teachers may teach groups of students ranging from pre-school through to university, or they may work with individual students. Employment opportunities are enhanced for music teachers who keep up to date with instrumental technology and sound reinforcement systems.

Related Jobs

Actor (p 94); Musician (p 108); Teacher - Art (p 125); Teacher - Primary (p 128).

Teacher – Physical Education

Also known as PE Teacher

Physical education (PE) teachers instruct students in sports, recreational activities and healthy lifestyle issues, in order to encourage and develop physical fitness and skills, self-esteem and interpersonal skills.

Physical education teachers:

- undertake general teaching tasks (see the separate entry for Teacher - Secondary)
- prepare a year-long program of learning experiences that link physical activities with issues related to health and wellbeing
- teach a range of elective and senior courses depending on the needs and interests of their students
- teach the basic techniques and skills associated with team and individual sports, dance, gymnastics, athletics, aquatics and recreational activities such as canoeing and bushwalking
- plan and deliver activities to assist students' skill progression
- teach students about community and personal health issues, including nutrition, sexuality, drug use and sexual health
- instruct students in the safety practices associated with different environments, including swimming pools, gymnasiums and playing fields
- coordinate special events such as inter-school sports programs, swimming and athletic carnivals and lifesaving programs
- present special days and seminars for senior students on various topics such as stress management, study skills and sexually transmitted infections (STIs)
- conduct compulsory health education programs that prepare students for life outside of school.

Most Physical education teachers work in secondary schools and are usually qualified to teach at least one other subject.

Personal Requirements

- Enjoy and have skills in physical activity

- Enthusiastic, patient and tactful
- Enjoy working with young people
- Good communication skills
- Commitment to personal health and physical fitness
- Excellent organisational skills
- Prepared to work outside of school hours

Education and Training

To become a physical education teacher you usually have to complete a degree in education, with a major in health and physical education or human movement. Alternatively, you could complete a relevant degree (such as human movement), followed by a postgraduate qualification in education or teaching.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information. For further details, visit www.gooduniversitiesguide.com.au.

Entry to postgraduate courses usually requires completion of an appropriate bachelor degree as well as teaching experience or a background in the sports, fitness or recreation industries. A number of universities in Australia offer postgraduate courses in education or teaching. They are also available by distance education. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking practical placements required by courses, students will need to obtain a Working with Children Check. A National Police Certificate may also be required. Contact the institutions you are interested in for more information.

You will need to register with the teaching board in your state or territory. Teachers are required by mandatory reporting laws to report suspected cases of child abuse or neglect.

Employment Opportunities

Physical education teachers are employed in government and non-government schools. Entry to this field is competitive but prospects are better for those willing to take up positions in non-metropolitan areas. There are some opportunities for relief or part-time work.

People with qualifications in physical education may also be employed in the leisure industry (as fitness instructors or managers of recreation centres, for example).

Related Jobs

Education Aide (p 123); Exercise Scientist (p 173); Fitness Instructor (p 263); Physiotherapist (p 227); Recreation Officer (p 124); Sports Coach (p 270); Sportsperson (p 271); Teacher - Secondary (p 129).

Teacher – Primary

Primary school teachers educate primary school children by planning and conducting an education programme to develop literacy and numeracy, as well as the physical, emotional, intellectual and social growth of their students. Primary school teachers are usually trained to teach the whole curriculum. Some undertake further studies to become specialist primary teachers who develop and teach programmes for students with special needs, rural and isolated children or children for whom English is a second language. In some schools, primary school teachers teach languages other than English if they have the appropriate qualifications, skills and experience.

Primary school teachers:

- prepare daily and longer-term lesson plans in accordance with curriculum guidelines
- teach a full range of learning areas, including English (reading, writing, speaking and listening), mathematics, science, technology, society and environment, creative arts, personal development, health and physical education
- develop children's interests, abilities and coordination using creative activities such as art, music and sport
- use computers to assist with lesson preparation, teaching and reporting
- develop and maintain good working habits and discipline in classrooms
- carry out administrative duties
- supervise students during classes and at other times in the school day, including in the playground during breaks
- attend staff meetings and other training and development sessions
- take part in joint decision-making about educational issues
- assess and evaluate students' progress in written and oral work
- discuss students' progress and concerns with parents and administrators
- assist with and organise sporting activities, school concerts and excursions
- prepare for and attend parent-teacher interviews and other functions.

Primary school teachers need to continually update their subject knowledge and teaching methods through private study and professional development activities. With further training and experience, they may be promoted to a position of educational leadership, such as primary school principal.

Personal Requirements

- Enjoy working with children
- Creative and organised

- Patient in dealing with students of differing abilities
- Able to communicate simply and clearly
- Prepared to work outside of school hours

Education and Training

To become a primary school teacher you usually have to complete a degree in primary education or primary school teaching. Alternatively, you can undertake a postgraduate qualification specialising in primary education after completing a degree with relevant study areas. To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking practical placements required by courses, students will need to obtain a Working with Children Check. A National Police Certificate may also be required.

You will need to register with the teaching board in your state or territory. Teachers are required by mandatory reporting laws to report suspected cases of child abuse or neglect.

Employment Opportunities

Competition for positions in metropolitan schools is very strong. Teachers should be prepared to move to areas of need (rural areas, for example) to secure a job or obtain promotion to senior positions. Once employed, prospects for advancement can be enhanced by obtaining higher qualifications.

Related Jobs

Early Childhood Educator (p 122); Education Aide (p 123); Librarian (p 188); Mathematician (p 242); Nanny (p 309); Teacher - Early Childhood (p 125); Teacher - Physical Education (p 127).

Teacher – Secondary

$1,954 | Very high skill | Stable

Also known as High School Teacher

Secondary school teachers teach one or more subjects within the school curriculum to secondary students. Subject areas include English, mathematics, science, history, geography, drama, dance, art, music, health and physical education, design, information technology, languages other than English, and home economics.

Secondary school teachers:

- prepare daily lessons and long-term teaching programs in accordance with state or territory curriculum and guidelines
- teach using a variety of methods, including formal lessons, discussions, practical activities, experiments, projects, assignments and excursions, taking into account the differences between individual students
- use information technology to assist with lesson preparation, teaching and reporting
- set tests, exams, projects, assignments and homework; mark and correct assessments; and sort the results
- evaluate and report on the progress of students, and discuss individual performance and problems with students and parents
- establish and maintain good working habits and discipline in classrooms and throughout the school
- supervise extra classes when other teachers are absent
- supervise students in the yard during lunchtime and other breaks
- carry out relevant administrative duties
- attend staff meetings, educational conferences and other professional development activities
- coordinate work experience and industry-based programs
- participate in other activities in partnership with parents and the school community, including parent-teacher nights, school council and other committees
- assist with organising sporting events, camping trips and other excursions
- be involved in distance education (for example, teaching using radio and television transmission, correspondence, audiovisual and other multimedia resources)
- coordinate administrative support programs and the work of non-teaching staff in schools
- network with other teachers
- work with other staff to revise the school's policies and curriculum implementation to reflect changing student needs and government initiatives.

Secondary school teachers need to continually update their subject knowledge and teaching methods through private study and professional development activities.

Personal Requirements

- Enthusiasm for, and ability in, your chosen subject area and teaching
- Excellent organisational skills
- Able to communicate concepts and instructions clearly
- Enjoy working with teenagers
- Patient when dealing with students of differing abilities and cultures
- Acceptance of the rights and needs of all individuals
- Prepared to work outside of school hours

Education and Training

To become a secondary school teacher you usually need to complete a four-year integrated course in which the subject area and teaching components are taught throughout (for example, a Bachelor of Secondary Education majoring in visual arts). Alternatively, you can complete a degree in a subject area

Interested in becoming a teacher, but not sure where to start?

Try our **Teaching Solution Finder**

une.edu.au/teaching

related to the current secondary school curriculum, followed by a postgraduate qualification in education (for example, a Graduate Diploma of Education).

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry, earth and environmental science, geography and physics are normally required. Some courses may have additional requirements. Universities have different prerequisites and some have flexible entry requirements or offer external study.

Additional Information

Before undertaking practical placements required by courses, students will need to obtain a Working with Children Check. A National Police Certificate may also be required. Contact the institutions you are interested in for more information.

You will need to register with the teaching board in your state or territory. Teachers are required by mandatory reporting laws to report suspected cases of child abuse or neglect.

Employment Opportunities

Secondary school teachers work in government and non-government schools. Some teachers are able to work in private practice, offering tutorial and subject-coaching services to students. Competition for positions in metropolitan government and non-government schools is strong. Teachers should be prepared to move to areas of need (rural areas, for example) to secure a job or a promotion to a senior position. Once employed, the prospects for advancement can be enhanced by obtaining higher qualifications.

With further training and experience, a secondary school teacher may be promoted to a position of educational leadership, such as secondary school principal.

Related Jobs

Career Development Practitioner (p 122); Education Aide (p 123); Historian (p 187); Librarian (p 188); Mathematician (p 242); Teacher - Art (p 125); Teacher - Early Childhood (p 125); Teacher - Music (p 127); Teacher - Physical Education (p 127); Teacher - Primary (p 128); Training Officer (p 131); Youth Worker (p 251).

Teacher – Special Education

Special education teachers develop and conduct learning programmes for preschool, primary and secondary students who have learning difficulties or an impairment in their physical, sensory, emotional or intellectual abilities. Some also teach students who are intellectually gifted.

Special education teachers:

- assess the abilities and potential of students requiring a specific study program using a variety of tests and other forms of assessment
- plan special courses of study to meet the needs of students
- teach academic subjects and practical self-help skills using various methods and aids to assist in the education and rehabilitation process
- develop and adapt the curriculum to make it relevant for students with disability
- observe students to evaluate and record their progress and to detect signs of developmental disorders, ill health or emotional disturbance
- work closely with other professionals, including guidance officers, speech therapists and psychologists
- promote health and safety concepts and social interaction with other students
- assist students with toileting, feeding and other personal matters (this may require lifting the students)
- discuss aspects of students' development with parents and other educators
- discuss the aims of the education program as a whole with parents
- participate in community activities and on school committees.

Special education teachers may work in schools for children with special needs or in mainstream classrooms, either with groups of students or on an individual basis. In mainstream schools, special education teachers are involved in the planning and implementation of programmes to enable students with disabilities to function successfully in a regular classroom setting.

Personal Requirements

- Dedicated, patient and tactful
- Able to relate easily to children
- Flexible and adaptable
- Able to motivate students to learn
- Able to communicate simply and clearly
- Understanding of people's special needs
- Prepared to work outside of school hours

Education and Training

To become a special education teacher you usually have to complete a degree in education, specialising in special education. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Alternatively, you can undertake a Graduate Diploma of Education, specialising in special education, after completing a degree in teaching or other relevant areas such as arts, social work or disability studies.

Additional Information

Before undertaking practical placements required by courses, students will need to obtain a Working with Children Check. A National Police Certificate may also be required. Contact the institutions you are interested in for more information.

You will also need to register with the teaching board in your state or territory. Teachers are required by mandatory reporting laws to report suspected cases of child abuse or neglect.

Employment Opportunities

Special education teachers are employed by government and non-government schools, as well as some special centres. Some teachers with special education qualifications are able to work in private practice, offering tutorial services for children with learning problems.

Demand for special education teachers is dependent on levels of government funding.

Related Jobs

Aged Care Worker (p 167); Art Therapist (p 94); Career Development Practitioner (p 122); Disability Support Worker (p 172); Occupational Therapist (p 225); Psychologist (p 220); Teacher - Primary (p 128); Teacher - Secondary (p 129); Training Officer (p 131).

Training Officer

$1,742 Very high skill Decline

Training officers plan, develop, implement and evaluate training and development programmes in organisations.

Training officers:

- coordinate a staff training program based on organisational and employee needs
- use questionnaires and surveys in consultation with managers and staff to analyse training needs as they relate to the goals of the organisation and work area
- compile training manuals
- develop training resources, which may involve preparing notes and visual displays from researched information or their own knowledge
- arrange or conduct training courses, which may involve demonstrating equipment, operating video recorders and cameras, leading group discussions or role-playing activities and employing experts to run sessions
- evaluate the effectiveness of training programs using surveys, questionnaires, interviews and by observation, in order to plan future courses or to amend existing ones
- obtain information on work-related external courses, prepare reports on their suitability and make recommendations on staff attendance at training courses
- prepare, administer and conduct training assessments
- provide career development sessions for existing staff and conduct induction sessions for new employees
- assist in developing training interventions to meet the needs of internal and external stakeholders
- support learners during training interventions
- maintain learner outcomes in a Learning Management System.

Training officers instruct staff and management in many areas including occupational health and safety, operating plant machinery and equipment, driving, industrial relations, preparing for retirement, general clerical duties and supervisory skills.

Personal Requirements

- Able to take initiative
- Tactful and mature
- Aptitude for research
- Good organisational skills
- Excellent communication and presentation skills

Education and Training

To become a training officer you usually have to study applied learning, business management, human resources or human resource management. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Applicants may be required to attend an interview. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

The Australian Institute of Training and Development (AITD) offers membership to those involved in the training industry. There are different levels of membership, for students through to those who have a high level of qualification and experience.

Academic training alone is not normally sufficient to find work in this field. Training officers often need to have extensive work experience and job knowledge, gained as an assistant, through work in specialist technical areas, or as a leading hand or supervisor.

Many Registered Training Organisations, including TAFEs, offer a Certificate IV in Training and Assessment. This may be of assistance to people with a trade or extensive work experience who are required to train other employees in their place of work. This qualification is also generally required to plan and conduct training and assessments within a Registered Training Organisation.

Employment Opportunities

Training officers work in federal, state, territory and local government departments and agencies, training institutions, and in many large private firms. Banks, retail stores, mining companies, manufacturing companies, health and medical organisations, and other large firms have staff training departments.

There is a growing tendency for organisations to employ training consultants for short-term contracts to undertake specific projects. Because of this, training consultants often combine training with other human resource duties such as personnel work.

There is an increasing need for training officers with specialised knowledge of new technology.

As a training officer gains experience, prospects of advancement and promotion improve. Opportunities exist for training officers to attain management positions or to become self-employed as training consultants.

Related Jobs

Career Development Practitioner (p 122); Health Promotion Practitioner (p 174); Human Resources Officer (p 59); Occupational Health and Safety Officer (p 178); Teacher - Secondary (p 129); Teacher - Special Education (p 130); University Lecturer (p 132); Workplace Relations Officer (p 67).

Tutor

Tutors provide academic instruction to students on both an individual and a group basis in a non-classroom environment.

A tutor:

- offer feedback to students using positive reinforcement techniques
- teach students skills to improve studying, note-taking and test-taking
- review student material, including marking worksheets, discussing texts and finding solutions to problems
- track and assess student progress
- provide instruction to students in order to improve academic performance and prepare for tests.

Tutors normally work in classrooms or their own homes, catering to individual and group environments.

Personal Requirements

- Excellent organisational skills
- Enthusiasm for teaching
- Ability to communicate effectively and explain instructions clearly
- Patient when dealing with students of differing abilities

Education and Training

To become a tutor you usually have to complete a degree in education and to get into these courses you normally need your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different

prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

To teach students under the age of 18, a tutor will usually need to obtain a Working with Children Check. A National Police Certificate may also be required.

Employment Opportunities

Tutors can work privately or for a tertiary institution. Private tutors may work out of a home office, a school or visit students at their homes. In a tertiary setting they are often current students assisting lecturers with marking, student questions and lesson planning.

Related Jobs

Teacher - English as a Second Language (p 126); Teacher - Music (p 127); Teacher - Primary (p 128); Teacher - Secondary (p 129).

University Lecturer

University lecturers teach tertiary students in one or more subject areas and conduct research projects.

University lecturers:

- prepare and deliver lectures, tutorials and practical classes
- assess student assignments and grade student performance
- supervise research students
- discuss with students their progress and/or aspirations
- organise and conduct field trips and excursions or other learning activities
- research a specialised field of study and publish the findings in books or professional and academic journals
- attend meetings and conferences related to research
- plan courses in consultation with other staff, arrange course timetables and coordinate and supervise teaching assistants to conduct classes
- serve on committees dealing with general departmental and administrative concerns
- prepare departmental budgets and associated reports
- provide professional consultative services to government and industry.

University lecturers may be employed on a full-time, part-time, contractual or casual basis. With further training and experience, a university lecturer may be promoted to a position of educational leadership, such as dean of a faculty, or a head of school or college principal.

Personal Requirements

- Academic ability
- Interested in original research
- Enjoy and have an aptitude for teaching
- Good oral and written communication skills
- Confidence in presenting information to an audience and fielding questions
- Able to work as part of a team
- Leadership and supervisory skills
- Organisational skills and attention to detail
- Able to analyse and solve problems

Education and Training

To become a university lecturer you usually have to complete a degree in your field, preferably at a masters or doctoral degree level. Relevant courses are widely available; consult institution handbooks for more information on courses in your field of interest. Previous teaching, research and/or industry experience is also looked on favourably by employing institutions.

Postgraduate teaching courses may help you gain employment. Entry to postgraduate teaching courses usually requires completion of an appropriate bachelor degree, as well as relevant work experience. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Tertiary institutions, such as universities, offer lectureships and other tertiary teaching positions. Lecturers may also be self-employed, working as consultants or in a professional practice. Competition for available positions is very strong.

Related Jobs

Historian (p 187); Research Officer (p 244); Training Officer (p 131); Vocational Education and Training (VET) Lecturer (p 132); Writer (p 191).

Vocational Education and Training (VET) Lecturer

Also known as TAFE Teacher , Teacher - Technical and Further Education (TAFE) , Technical Teacher , Technical and Further Education Lecturer and VET Lecturer

Vocational Education and Training (VET) lecturers teach vocational courses connected with specific industries and areas of work to help people enter or re-enter the workforce. VET lecturers teach subjects in which they have specialist knowledge, skills and experience, such as building and construction, business and commerce, commercial photography, hairdressing, horticulture, hospitality and tourism, retail, music, art, science, engineering and areas of health. Some VET lecturers teach in non-industry specific areas such as languages, literacy and general workplace preparation.

VET lecturers:

- research and write a syllabus which covers everything to be taught in a course
- interpret training packages, prepare lessons and produce resources such as typed notes, diagrams, demonstrations and model patterns for use in teaching
- teach students in classrooms or workshops, providing theory and practical training through lectures, discussions, practical demonstrations and supervision
- assess students by setting and marking exams and assignments and evaluating completed projects
- carry out administrative tasks, such as keeping student records, arranging timetables and ordering supplies of materials to be used in teaching
- counsel and advise students with career or personal problems, or refer them to counsellors
- attend meetings and serve on committees, or liaise with the community and industry.

VET lecturers may teach courses during the day, at night and on weekends. They need to constantly revise their own knowledge of their subject area and conduct industry and student surveys to ensure that course content and teaching methods are up to date.

Personal Requirements

- enthusiasm for, and ability in, their chosen field
- good organisational skills
- able to communicate concepts and instructions clearly
- enjoy working with young and older adults
- patient when dealing with students of differing abilities and from different cultures
- acceptance of the rights and needs of individual students.

Education and Training

To become a VET lecturer, you usually need an appropriate qualification and/or experience in the field that you wish to teach in. This could be a trade, profession, craft or vocational area. Once you have qualifications or experience in your subject area, entry to this occupation may be improved with teaching or training qualifications. A VET qualification in training and assessment, training design and development, or vocational education and training is required to teach accredited training. VET institutes will often support casual and part-time staff in obtaining these qualifications. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information. You may be able to study through distance education.

In addition to a VET qualification, a tertiary qualification in adult, vocational and workplace learning; tertiary teaching; or education, specialising in applied learning, is recommended for full-time staff. A number of institutions in Australia offer courses in these areas at bachelor degree and postgraduate levels. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Institutions have different prerequisites and some have flexible entry requirements or offer external study.

Employment Opportunities

VET lecturers work at VET institutes, regional colleges, private colleges, corporate training centres, and increasingly, in workplaces. Each VET institute is responsible for the employment of its own lecturers.

Engineering & technology

Engineers make, build and design a huge range of things that we use on a daily basis. Many courses direct you to a particular specialisation, however it is possible to combine other fields through double degrees and postgraduate study.

Courses and specialisations

Engineering

While some specialisations focus on a certain type of technology (automotive, aerospace, biomedical, marine and telecommunications), others are concerned with adapting certain base elements or resources (chemical, electrical, materials and mechanical). Another group concentrates on harvesting, developing and sustaining natural resources (agricultural, environmental and mining). Newer fields include aeronautics, informatics, mechatronics, alternative energy and genetic engineering.

Surveying

The various traditional surveying specialisations (cadastral, marine and mining) now sit alongside a host of other geoinformatics sub-fields such as geographic information systems, spatial information systems, global positioning and photogrammetry, all of which use technology to collect, analyse, display and manage geographical and spatial information.

Where to study

Overall, engineering is fairly tough to get into compared with other fields. Subjects such as mathematics and sciences (especially physics) are almost always required. There is often a difference in the cut-off scores between single and combined degrees.

Engineering degrees are offered at almost all universities, although some specialisations are more widely available than others. In order to practise, you will need to meet the accreditation requirements set by Engineers Australia, which includes a period of compulsory industry experience.

Degrees in surveying and its many specialisations are offered at a number of universities around the country — just remember to check course handbooks to ensure that the course covers the field in which you are looking to specialise.

Five-star universities

Educational experience

FEDERATION	81.3%
JCU	79.7%
CANBERRA	77.9%
FLINDERS	77.3%
LA TROBE	76.9%
ECU	76.3%
NEWCASTLE	76.0%
QUEENSLAND	75.7%

National average
68.8%

Graduate employment

CQUni	96.3%
LA TROBE	95.2%
CDU	94.0%
DEAKIN	92.4%
UniSQ	91.9%
CURTIN	91.4%
SUNSHINE COAST	91.1%
TASMANIA	90.7%

National average
83.6%

Learner engagement

VU	69.0%
ANU	66.5%
FEDERATION	65.6%
MURDOCH	65.6%
ADELAIDE	64.7%
MACQUARIE	64.6%
MONASH	64.6%
QUEENSLAND	64.6%
ECU	64.5%

National average
56.1%

Learning resources

FEDERATION	96.3%
FLINDERS	92.3%
ECU	89.8%
MURDOCH	89.1%
QUEENSLAND	88.6%
SOUTHERN CROSS	86.8%
UWA	86.5%

National average
80.2%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

8,872
Undergraduate

30,198
Postgraduate

9,676
International undergraduate

What can I do?

- Mining
- Telecommunications
- Environmental engineering
- IT
- Manufacturing
- Engineering management

Graduate starting salary

$62,900
Undergraduate

$72,700
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

83.6%
Undergraduate

88.2%
Postgraduate

Five-star universities

Median starting salary

CQUni	$83,000
UniSQ	$82,900
CANBERRA	$81,400
CDU	$77,700
MURDOCH	$75,500
UTS	$71,200
TASMANIA	$70,800

National average
$62,900

Skills development

SOUTHERN CROSS	84.1%
NEWCASTLE	81.4%
ECU	80.6%
JCU	80.2%
QUEENSLAND	79.9%
MONASH	79.7%
CQUni	79.3%
CANBERRA	79.3%
RMIT	78.7%

National average
76.3%

Student support

JCU	85.4%
CANBERRA	82.5%
FEDERATION	79.3%
CQUni	79.2%
FLINDERS	78.6%
ECU	78.1%
DEAKIN	76.7%

National average
69.7%

Teaching quality

JCU	83.1%
CANBERRA	83.0%
NEWCASTLE	82.4%
LA TROBE	82.2%
QUEENSLAND	82.1%
SOUTHERN CROSS	79.4%
MURDOCH	78.3%
FEDERATION	78.1%

National average
74.2%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Aerospace Engineer

$2,155

Very high skill

Very strong

Also known as Aeronautical Engineer , Engineer - Aerospace and addition name

Aerospace engineers perform and supervise the design, development, manufacture and maintenance work of all types of flight vehicles. This may include military and civilian aeroplanes, helicopters, missiles, launch vehicles, spacecraft, satellites, and control and guidance systems.

Aerospace engineers:

- plan and design aircraft, aircraft parts and support equipment by preparing drawings and making mathematical calculations
- design modifications to systems, such as fuel or air conditioning, and outline installation procedures
- conduct tests to measure the performance of an aircraft or part, or to ensure design specifications and airworthiness requirements are met
- supervise the assembly of airframes and the installation of engines, instruments and other equipment
- investigate failed engines or other aviation components
- develop procedures for the repair of aviation components
- assess mechanical systems, flight characteristics and aircraft performance
- participate in flight test programs to measure take-off distances, rate of climb, stall speeds, manoeuvrability and landing capacities
- evaluate new and used aircraft and advise potential purchasers based on their findings.

Specialisations

- specilisation

Personal Requirements

- Enjoy technical and engineering activities
- Analytical and problem-solving ability
- Good oral and written communication skills
- Practical and creative ability
- Able to work without supervision and accept responsibility
- Able to work as part of a team
- Normal colour vision may be required

Education and Training

To become an aerospace engineer you usually have to complete an engineering degree at university with a major in aeronautical or aerospace engineering. To get into these courses you usually need to gain your Senior Secondary Certificate of Education.

Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. A number of universities in Australia offer degrees in engineering with a major in aeronautical or aerospace engineering and have different prerequisites. Contact the institutions you are interested in for more information.

Additional Information

Students who have completed at least one year of an approved university course in engineering lasting three or four years may apply to join the Undergraduate Scheme in the Royal Australian Air Force (RAAF) or Royal Australian Navy (RAN). Those studying courses five or six years in length must have completed at least two years of study. If accepted, students may choose to finish their degree at their chosen institution or join the Australian Defence Force Academy in Canberra.

Graduates may be eligible for membership of Engineers Australia. Visit their website for more details.

Employment Opportunities

In Australia, most aerospace engineering work involves aircraft modification and assessment of damage. However, there is also a significant industry engaged in manufacture under licence.

Career opportunities exist with aerospace companies, aircraft manufacturers, aeronautical consulting services, the RAAF and the RAN. The Department of Defence employs aeronautical engineers in Defence Research Centres across the country. The Civil Aviation Safety Authority (www.casa.gov.au) also employs aerospace engineers to ensure compliance with design and certification standards, the functioning of associated electrical power plants and fuel systems, and overall airworthiness and flight handling in normal and emergency situations.

Related Jobs

Aircraft Maintenance Engineer (p 137); Civil Engineer (p 138); Electrical Engineer (p 139); Intelligence Analyst (p 156); Mechanical Engineer (p 143).

Agricultural Engineer

$2,155

Very high skill

Very strong

Agricultural engineers study and advise on the use of engineering science and technology in agricultural production and management of natural resources. They solve problems relating to such things as sustainable agricultural production, the environmental impacts of intensive agriculture and the post-harvest handling of agricultural products.

Agricultural engineers:

- plan, supervise and manage the building of irrigation, drainage, flood and water control systems
- design, develop and manage the manufacture of agricultural machinery, equipment and instrumentation, such as sensing, measuring and recording devices
- plan and supervise the construction of farm and other related buildings
- supervise ground preparation, seeding and harvesting, spray technology, post-harvesting and transport equipment
- supervise the cleaning, grading, milling, mixing, food processing, packaging and distribution of produce
- perform environmental impact assessments
- analyse, advise and plan for effective soil conservation and the control of water logging and soil salinity
- conduct research and study the results of work on farms, forests and research stations
- prepare and present reports.

Agricultural engineers may work indoors or outdoors, in a laboratory or office, or on a farm or research station.

Personal Requirements

- Able to identify, analyse and solve problems
- Good oral and written communication skills
- Aptitude for computing and design
- Able to accept responsibility and work without supervision

Education and Training

To become an agricultural engineer you usually have to study engineering at university with a major in agricultural engineering. Entry usually requires you to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required.

Additional Information

Graduates may be eligible for membership of Engineers Australia. Visit their website for more details.

Employment Opportunities

Agricultural engineers may be employed in private consulting firms, or by manufacturers and distributors of agricultural and irrigation equipment, corporate farms, intensive animal industries and food processing plants. In the public sector, jobs may be available with state or territory governments in areas such as water supply, agriculture, forestry, soil conservation and environment protection. Employment can also be found overseas in both developed and developing nations.

Related Jobs

Agricultural Scientist (p 28); Agricultural Technical Officer (p 28); Chemical Engineer (p 137); Civil Engineer (p 138); Environmental Engineer (p 141); Environmental Scientist (p 31); Mechanical Engineer (p 143).

Aircraft Maintenance Engineer

$1,890 Medium skill Stable

Also known as Aircraft Maintenance Engineering Tradesperson and Aircraft Maintenance Technician

Aircraft maintenance engineers install, maintain and repair aircraft engines; airframes; airframe systems; electrical, instrument and radio systems; and aircraft structures and surface finishes.

Aircraft maintenance engineers:

- dismantle, inspect, repair and reassemble aircraft engines, airframe components and systems, electrical components and systems, avionic components and systems, and aircraft structures
- test aircraft communication equipment, instruments and electronic systems
- conduct routine pre-flight inspections.

Specialisations

- Aircraft Maintenance Engineer (Avionics)
- Aircraft Maintenance Engineer (Mechanical)
- Aircraft Maintenance Engineer (Structures)
- Aircraft Mechanic (Avionics)
- Aircraft Mechanic (Mechanical)

Personal Requirements

- Enjoy technical and engineering activities
- Medically fit, with good hearing and vision (colour blindness may make people unsuitable for some aircraft trades)
- Good hand-eye coordination
- Able to concentrate for long periods
- Neat and accurate
- Attention to detail
- Able to work in confined spaces and at heights on platforms around aircraft (for some specialisations)

Education and Training

To become an aircraft maintenance engineer you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

You can also become an aircraft maaintenance engineer by completing a VET qualification in aeroskills. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Additional Information

After graduating with an Aircraft Maintenance Engineer (AME) trade certificate and gaining the necessary experience, you may undertake further training to become a Licensed Aircraft Maintenance Engineer (LAME).

An aircraft maintenance engineer can only work on aircraft under the supervision of a licensed aircraft maintenance engineer.

Employment Opportunities

Aircraft maintenance engineers may be employed by Approved Maintenance Organisations in general aviation, domestic and international airlines, aerospace companies and the Australian Defence Force.

Related Jobs

Aerospace Engineer (p 136); Air Force Trades (p 151); Electrician (p 291); Engineering Tradesperson - Fabrication (p 293); Instrument Fitter (p 300); Mechatronic Engineer (p 144); Pilot (p 148).

Chemical Engineer

$3,019 Very high skill Strong

Also known as Chemical Process Engineer , Engineer - Chemical , Metallurgical Engineer , Microbiological Engineer and Water Treatment Engineer

Chemical engineers design and coordinate the construction and operation of manufacturing facilities and processes that convert raw materials into everyday products such as petrol, toothpaste, pharmaceuticals and plastics.

Chemical engineers:

- seek new and more efficient processes and materials, or improve or find new uses for existing materials
- design methods and equipment to control and contain the processes that transform basic materials into useful products
- ensure the safe, efficient and environmentally friendly operation of equipment and test products at various stages of production to check their quality
- make plans and specifications for new production plants, taking into account available technology, the cost and size of equipment and storage space, market requirements, transport methods and disposal of surplus substances
- review current methods of production for cost efficiency, environmental friendliness, maximum output and optimal product quality
- identify faults in the day-to-day operation of process plants (such as oil refining, steel making and water treatment) and take corrective action
- prepare reports, feasibility studies and cost analyses of processes
- provide product process information to sales and marketing personnel or customers
- direct and coordinate the work of maintenance and construction tradespeople or process plant operators.

Chemical engineers usually work standard hours, but may be called in to meet demanding deadlines. Those with responsibilities for continuous process plants may be on call 24 hours a day. Some may work shifts during the commissioning of new plants.

Workplaces range from laboratories and processing plants to engineering design offices and research institutions.

Chemical engineers may specialise in the following fields:

- Bioprocess - involves pharmaceuticals and the food and drink industries.
- Chemical Process - involves the fertiliser industry, pesticides and herbicides, caustic soda, glass and specialty chemicals.
- Combustion - involves large industrial furnaces such as those for steel manufacture or power generation from coal or gas.
- Environmental - involves waste and water treatment, environmental regulations and recycling.
- Minerals - involves major minerals industries such as alumina/aluminium, steel, copper, lead and gold.
- Petrochemicals - involves the conversion of oil and gas into plastics, synthetic rubber and similar end uses.
- Petroleum - involves the production of oil, gas and LPG from onshore and offshore fields.
- Process Control - involves the instrumentation and control systems, which enable a manufacturing process to run smoothly, safely and efficiently.
- Project Delivery - involves the construction of a process plant, converting the design into an efficient, safe operating plant.

Personal Requirements

- Enjoy technical and engineering work
- Safety-conscious
- Able to identify, analyse and solve problems
- Good communication skills
- Aptitude for computing and design
- Practical and creative
- Able to work independently and accept responsibility

Education and Training

To become a chemical engineer you usually have to complete an engineering degree at university with a major in chemical engineering or industrial chemistry. Alternatively, you can complete a relevant degree, followed by a postgraduate qualification in chemical engineering. To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Graduates may be eligible for membership of Engineers Australia or the Institution of Chemical Engineers (IChemE) in Australia. Visit their websites for more details.

Employment Opportunities

Major employing industries include manufacturers of iron and steel basic products, manufacturers of organic industrial chemicals, the minerals industry and petroleum refineries. There is also scope for chemical engineers to move into related areas such as biotechnology, food engineering and mineral engineering. Others are employed by government agencies assessing and monitoring the risk and impact of chemical processes on the environment (checking air and water quality, for example). Those with several years of experience may become consultants with engineering firms or on a self-employed basis. A range of careers also exist with the Commonwealth Scientific and Industrial Research Organisation (CSIRO), the Australian Nuclear Science and Technology Organisation and state authorities concerned with gas, electricity, water supply and environmental protection. With experience, and sometimes further training, chemical engineers may advance to become business, technical, financial or works managers; personnel directors; or managing directors of large companies.

Related Jobs

Chemical Plant Operator (p 283); Chemist (p 235); Civil Engineer (p 138); Environmental Engineer (p 141); Industrial Engineer (p 141); Materials Engineer (p 143); Mechanical Engineer (p 143); Metallurgist (p 145); Mining Engineer (p 145); Petroleum Engineer (p 147); Process Plant Operator (Oil and Gas) (p 313).

Civil Engineer

$1,962 | Very high skill | Strong

Also known as Construction Engineer , Engineer - Civil and Municipal Engineer

Civil engineers plan, design, construct, operate and maintain roads, bridges, dams, water supply schemes, sewerage systems, transportation systems, harbours, canals, dockyards, airports, railways, factories and large buildings.

Civil engineers:

- investigate sites to determine the most suitable foundation for a proposed construction
- research and advise on the best engineering solution to meet a client's needs and budget
- prepare engineering calculations required for the design of projects, and supervise the drafting of plans
- produce detailed designs and documentation for the construction and implementation of civil engineering projects
- organise the delivery of materials, plant machinery and

equipment needed for the construction project and supervise labour
- develop detailed programs for the coordination of site activities
- work with other engineers, architects, landscape architects and environmental scientists
- assist government bodies in preparing yearly works programs (such as work on car parks, drainage, roads, aerodromes or sewerage systems) within set budgets
- operate computers to assist with the design of civil engineering projects
- coordinate and direct research, development and testing of materials, processes or systems related to civil engineering works
- research, advise on and plan the control and minimisation of air, water and solid waste pollution, and the management of water resources
- supervise the testing and commissioning of completed works
- analyse and interpret reports on loading, labour, productivity, quality, materials and performance
- analyse risks associated with natural disasters (including cyclones, earthquakes, fires and floods), and design structures and services to meet appropriate standards
- arrange for geological and geophysical investigations and carry out feasibility studies.

Civil engineers may work in offices or on site. They may be required to work long hours and meet strict deadlines while working under minimal supervision. Civil engineers deal with various professional, skilled and semi-skilled people. Consulting and contracting engineers often travel interstate, and some travel overseas. It may be necessary for some civil engineers to change residence every few years as their work takes them from one major engineering site to another.

Specialisations
- Airport Engineer
- Highway Engineer
- Railway Engineer
- Water Resources Engineer

Personal Requirements
- Able to identify, analyse and solve problems
- Good oral and written communication skills
- Aptitude for computing and design
- Practical and creative
- Able to work without supervision
- Able to work as part of a team
- Able to accept responsibility
- Willing to contribute and adhere to the safety requirements of the operation

Education and Training

To become a civil engineer you usually have to complete a degree in engineering at university with a major in civil engineering. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Students may be eligible to join Engineers Australia as student members. Upon graduation, after providing a certified copy of their degree, they may apply for graduate membership of the institution without further examination.

Employment Opportunities

Civil engineers work in a range of areas, including structural engineering, water resources, foundation engineering, transport, town planning and construction. They are employed by government departments and agencies, municipal authorities, civil engineering contractors, consulting engineers and mining companies. There may also be opportunities for self-employment as a contractor or consultant. Much of the work previously undertaken by government departments is contracted out to consulting engineers. A small proportion of engineers work in research activities and teach in industrial, government and university research establishments.

Related Jobs

Architect (p 43); Electrical Engineer (p 139); Environmental Engineer (p 141); Geological Engineer (p 238); Geologist (p 239); Industrial Engineer (p 141); Mechanical Engineer (p 143); Mining Engineer (p 145); Naval Architect (p 146); Quality Assurance Inspector (p 314); Surveyor (p 46).

Electrical Engineer

$2,160 | Very high skill | Stable

Electrical engineers design, develop and supervise the manufacture, installation, operation and maintenance of electrical systems. They work on systems for the generation, distribution, utilisation and control of electric power. They also work on electronic systems used for computing, communications and other industrial applications.

Electrical engineers may specialise as electrical maintenance engineers, electrical power engineers, electrical design engineers, communications engineers or computer engineers. They may also specialise in areas such as the design and operation of power plants, generators, metal refining, rolling mills, motors and transformers, and in researching new applications of technology or production machinery.

Electrical engineers:

- plan and design power stations and equipment for generators
- supervise construction plans and specifications and draw up contracts
- supervise operating and maintenance staff
- design and produce drawings of electrical systems using computer-aided design (CAD)
- decide on the type and arrangement of circuits, transformers, circuit-breakers, transmission lines and equipment, based on calculations
- make or improve products such as electric motors, parts, equipment and appliances
- prepare and interpret specifications, drawings and regulations for the use of electric power equipment
- determine delivery and installation schedules for machines, switchgear, cables and fittings
- organise and manage staff and materials in the making of electrical parts, machines, appliances and equipment
- ensure completed works meet specifications and safety standards
- design and install control and signalling devices for road, rail and air traffic
- design telecommunications equipment and networks
- contribute and adhere to safety requirements.

Electrical engineers work with senior administrators, civil and mechanical engineers, computer scientists and various workers in the business, building and construction industries. They advise employers, associates or clients and consult with scientists, industrial designers and architects.

Personal Requirements

- Able to identify, analyse and solve problems
- Good oral and written communication skills
- Enjoy computing and technical design
- Practical and creative
- Able to work independently and accept responsibility

Education and Training

To become an electrical engineer you usually have to complete an engineering degree at university with a major in electrical, electronic, electrical power, telecommunications and network, or communications engineering. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Graduates may be eligible for membership of Engineers Australia. Visit their website for more details.

Depending on your state or territory, you may need to register with authorities specific to your area of work.

Employment Opportunities

Electrical engineers work for state, territory and federal government departments; electricity suppliers; consulting engineers; and firms in the minerals, defence, telecommunications, information technology, steel, manufacturing and service industries.

The telecommunications industry is expanding due to factors such as the rapid development of technology, the increased use of mobile phones by the Australian public and new telecommunications companies entering the market.

Related Jobs

Aerospace Engineer (p 136); Army Officer (p 151); Cable Jointer (p 281); Civil Engineer (p 138); Intelligence Analyst (p 156); Mathematician (p 242); Mechanical Engineer (p 143); Naval Architect (p 146).

Electronics Engineer

Also known as Engineer - Electronics

Electronics engineers design, develop, test and maintain electronic parts and systems used in computers, communications, navigation, industry and entertainment.

Electronics engineers:

- design circuits for electronic control systems and instrumentation
- prepare and supervise designs, specifications, estimates, tenders and contracts
- program and operate computers to assist with complex calculations
- determine the type and arrangement of circuit parts and develop testing equipment and methods
- determine the type of installation, location, layout and transmission medium by assessing communication traffic and levels of service at installations
- determine and monitor performance, safety standards and methods for modification, maintenance and repair
- check installations to ensure they meet contract conditions
- research new applications of technology
- talk to clients, other engineers, technical officers, technicians, tradespeople and other workers.

Personal Requirements

- Aptitude for technical activities
- Good leadership skills
- Able to identify, analyse and solve problems
- Good oral and written communication skills
- Enjoy computing and technical design
- Practical and creative
- Able to work independently and accept responsibility

Education and Training

To become an electronics engineer you usually have to study electronic engineering at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Electronics engineers work in industries such as communications, aviation, defence, robotics, information technology, biomedical engineering and meteorology.

Employment opportunities exist with federal, state and territory government departments and authorities. Electronics engineers are also employed in private industry developing equipment for various industrial purposes; in hospitals; in radio and television stations; in the manufacture of electronic equipment, particularly in the computer field; and as sales engineers. Some may work in research laboratories and in universities and colleges undertaking

research and teaching, while others set themselves up in business as consultants. The Australian Defence Force offers specialisation as a Navy Electronic Engineer to assist in monitoring and managing ships' communications, radar and weapons systems.

Related Jobs

Biomedical Engineer (p 233); Computer Engineer (p 81); Electrical Engineer (p 139); Intelligence Analyst (p 156); Mechatronic Engineer (p 144); Programmer (Information Technology) (p 86); Telecommunications Engineer (p 148).

Environmental Engineer

$2,155 | Very high skill | Very strong

Also known as Engineer - Environmental

Environmental engineers are concerned with assessing and managing the effects of human and other activity on the natural and built environment. They apply their engineering knowledge and skills to such things as environmental impact assessment, natural resources management and pollution control.

Environmental engineers:

- research and develop new technologies and techniques to improve the environmental acceptability of engineering projects
- evaluate environmental and social impacts of engineering projects in association with the public, scientists and other engineers
- design and operate processes to treat waste to a standard acceptable for discharge and/or recycling (waste water treatment or waste solidification, for example)
- work with occupational health experts to ensure a hazard-free working environment
- prepare reports and studies on the best approach to environmental management in new and existing engineering projects, taking into account environmentally sustainable economic activity, as well as environmental and industrial factors
- effectively communicate relevant issues to other technical staff, managers, regulatory authorities, public interest groups and the public.

They frequently work closely with other professionals, at times pooling expertise on particular projects. They may work in offices or outdoors when involved in construction projects.

Environmental engineers may specialise in particular industry sectors such as the minerals or chemical industries or in civil engineering projects.

Personal Requirements

- Enjoy technical and engineering activities
- Willing to adhere to safety requirements
- Able to identify, analyse and solve problems
- Good oral and written communication skills
- Enjoy computing and technical design
- Practical and creative
- Able to accept responsibility

Education and Training

To become an environmental engineer you usually have to complete a degree in engineering with a major in environmental engineering. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Graduates may be eligible for membership of Engineers Australia. Visit their website for more details.

Employment Opportunities

Environmental engineers may be employed with large construction and mining organisations, large forestry organisations, regulatory authorities and some government departments. Opportunities also exist for self-employment or work with consulting firms.

With experience, and sometimes further training, it is possible to progress to local or corporate management roles.

Related Jobs

Agricultural Technical Officer (p 28); Mining Engineer (p 145); Petroleum Engineer (p 147).

Industrial Engineer

$2,414 | Very high skill | Decline

Industrial engineers plan, organise, supervise and manage the operations of industries to ensure the economical, safe and effective use of materials, energy and people.

Industrial engineers:

- assess the techniques and equipment used in production processes to determine if they can operate more efficiently
- plan and design systems that increase productivity by improving the integration of people, materials, equipment and finance
- choose and develop safer and more efficient manufacturing processes using new, existing or modified machinery and equipment
- introduce or recommend changes to work methods, safety measures and labour organisation
- determine the time taken to perform a task or complete a particular production stage and set performance standards accordingly

- maximise comfort in the workplace by analysing and recommending changes to improve light, alter bench space or machine height and reduce noise.

Personal Requirements

- Enjoy technical work
- Able to identify, analyse and solve problems
- Good oral and written communication skills
- Practical and creative
- Aptitude for technical activities
- Able to work without supervision
- Able to accept responsibility

Education and Training

To become an industrial engineer you usually have to complete a degree in engineering with a major in manufacturing or mechanical engineering. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Industrial engineers are mainly employed by motor vehicle, refrigerator, household appliance and agricultural machinery manufacturing industries, as well as in the wholesale and retail trade. Others find employment in government departments, hospitals and management consultancies and research establishments. Employment is mainly in the private sector.

Industrial engineers are increasingly being employed in service industries such as retailing and banking. Factors that may affect the occupation are the levels of activity and restructuring in the manufacturing industry, government incentives for industry to restructure and the volume of product sales.

Related Jobs

Interior Designer (p 105); Management Consultant (p 61); Mechanical Engineer (p 143).

Marine Engineer

Also known as Engineer - Marine and Ship's Engineer

Marine engineers control the installation, operation and maintenance of machinery and equipment on ships and vessels.

Marine engineers work in the engine departments of cargo ships, dredges, offshore supply and drill vessels, floating production storage and offtake facilities, oil tankers, passenger ships and tugs. They need to be familiar with various types of diesel engines, steam plant and gas turbines.

Marine engineers:

- ensure that the main engines and associated machinery, electrics, refrigeration, air conditioning and cargo-handling equipment on ships are operating efficiently
- monitor automatic data-recording equipment, or record readings manually on ships without such equipment
- analyse the readings for trends and make adjustments to machinery operation as required
- carry out regular maintenance of the main engine and repair defective auxiliary equipment
- act as officer in charge of the engineering watch at sea and in port
- ensure that vessel operations do not create pollution
- maintain engine room stores and record usage of parts and equipment
- supervise staff and carry out major maintenance work while the ship is in port
- be involved with the operation of small craft such as patrol boats, tugs, river ferries and port authority vessels.

Marine engineers may work onshore or at sea, or both. Those who work at sea may be away from home for long periods. They may work long shifts and be on call to work in emergencies. Engine rooms can be very noisy, hot and dirty. Physical exertion is required when repairing machinery.

Personal Requirements

- Enjoy technical and engineering activities
- Enjoy machinery operation
- Able to cope with the physical demands of the job
- Prepared to accept responsibility
- Able to work as part of a team
- Prepared to work for long periods at sea

Education and Training

There are a number of pathways to become a marine engineer. The two main ways are through an Engineer Traineeship or Engineering Cadetship.

To become a Trainee Engineer, you must complete an engineering trade approved by the Australian Maritime Safety Authority. A Trainee Engineer can then become a marine engineer by completing a Certificate of Safety Training followed by at least 36 weeks of qualifying sea service on board an appropriate vessel. An approved Training Record Book must be completed during the sea service. A Trainee Engineer must also complete an approved VET qualification in maritime operations (engineer watchkeeper). On completion of the course, having met sea service and legislative requirements, the trainee will be examined by the Australian Maritime Safety Authority for an Engineer Watchkeeper Certificate of Competency. The trainee may then undertake more advanced VET qualifications in marine engineering and gain further seagoing marine engineer qualifications. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

To become an Engineer Cadet you must complete Year 12 and an Engineer Cadetship approved by the Australian Maritime Safety Authority. This requires the same initial training as an Engineer Trainee, plus completion of a VET qualification in maritime operations, specialising in marine engineering class 2, and a minimum of 36 weeks of approved workshop trade training. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Additional Information

Applicants must meet the medical health standard required for a seagoing career and pass the eyesight and colour vision tests required by the Australian Maritime Safety Authority.

Employment Opportunities

Marine engineers are employed by shipping companies, including general cargo, container, bulk carrier and tanker companies.

Opportunities also exist in the offshore industry, such as on tugs and supply vessels, drilling platforms and government agencies operating dredges and other port maintenance craft.

Fully qualified marine engineers may be able to secure a range of shore-based positions, such as engineering superintendent or marine surveyor.

The Australian Defence Force employs Navy Marine Engineers on

and off-shore to develop, monitor and manage the structure and mechanical operations of Navy fleets.

With further sea service, training and examinations, a marine engineer watchkeeper may advance to first engineer and chief engineer.

Australian Certificates of Competency may be internationally recognised.

Related Jobs

Engineering Tradesperson - Mechanical (p 293); Mechanical Engineering Associate (p 144).

Materials Engineer

Materials engineers investigate the properties of metals, ceramics, polymers, plastics and other materials, and develop and assess their commercial and engineering applications. Materials engineers may specialise in metals, ceramics, polymers, plastics or composites.

Materials engineers:

- study the structure and properties of metals and other materials
- develop methods for processing minerals through to manufactured materials
- investigate methods for shaping and fabricating materials, joining materials, improving existing materials and evaluating new ones
- participate in the design of products using advanced materials
- investigate material failures
- study ways to extend the life of materials
- establish procedures and methods to protect materials against deterioration and assess their durability
- study possible improvements to production methods, report on the nature and uses of materials, and advise on manufacturing techniques and quality control systems.

They often work closely with other professionals, pooling expertise on particular projects. They may work in production plants, offices and outdoors when involved in construction projects.

Personal Requirements

- Enjoy science, technical and engineering activities
- Able to identify, analyse and solve problems
- Able to work as part of a team
- Good oral and written communication skills
- A capacity for creative thinking

Education and Training

To become a materials engineer you usually have to complete a degree in engineering at university with a major in materials engineering. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Graduates may be eligible to join Engineers Australia and Materials Australia. Visit their websites for more details.

Employment Opportunities

Materials engineers find employment in industrial or government research organisations and in government agencies such as those associated with power generation, communication, defence, construction and transport. A wide range of manufacturing industries also employ materials engineers, including those concerned with the processing of minerals, plastics, rubbers, ceramics, paper, electronic devices and packaging.

There are also opportunities for experienced materials engineers to become self-employed consultants.

Related Jobs

Biomedical Engineer (p 233); Mechanical Engineer (p 143); Naval Architect (p 146); Physicist (p 243).

Mechanical Engineer

Mechanical engineers plan, design and oversee the development, installation, operation and maintenance of machinery. They conduct research to solve practical engineering problems and improve efficiency.

Mechanical engineers:

- design new machines, equipment or systems, taking into account cost, availability of materials, and strength and maintenance requirements
- consider the appearance of the designs as well as the impact on users and on the environment
- carry out research on the use of different types of fuel and energy, materials handling, heating and cooling processes, the storage and pumping of liquids and gases, and environmental controls
- use computer-aided design (CAD) to assist with design and drawing
- design and construct resource development projects such as offshore platforms, onshore gas plants and iron ore mining facilities
- supervise the operation of manufacturing process plants such as vehicle and electrical appliance production plants, coal handling installations, power stations, and sewerage and water supply pumping stations
- specify, select and install factory machinery and production systems and manage machinery maintenance
- set up work control systems (such as the testing of equipment) to ensure that performance, quality, cost and safety requirements are met
- act as consultants, researching possible changes or improvements and estimating costs of products for clients.

Mechanical engineers often work closely with other professionals (such as with architects in designing air conditioning plants), at times pooling expertise on particular projects. Mechanical engineers may work in production plants, in offices and outdoors when involved in construction projects.

Personal Requirements

- Enjoy technical and engineering activities
- Willing to adhere to safety requirements
- Able to identify, analyse and solve problems
- Good oral and written communication skills
- Enjoy computing and technical design
- Practical and creative
- Able to work independently or as part of a team
- Able to accept responsibility

Education and Training

To become a mechanical engineer you usually have to complete a degree in engineering at university with a major in mechanical engineering. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Mechanical engineers are involved in a wide range of industries, including aviation, power generation, manufacturing, refrigeration and air conditioning, transportation and mechanical handling. They may specialise in areas such as research and development, engineering design, production, plant and maintenance.

Mechanical engineers work in private engineering firms and in the building, mining, construction, power, manufacturing and processing industries. Universities and federal, state, territory and local government agencies also offer opportunities for employment. In addition, some mechanical engineers find employment with consultancy firms, while others are self-employed as consultants or contractors.

Job opportunities depend on activity in the minerals, manufacturing and construction industries.

Related Jobs

Agricultural Engineer (p 136); Chemical Engineer (p 137); Civil Engineer (p 138); Electrical Engineer (p 139); Materials Engineer (p 143); Mathematician (p 242); Mechanical Engineering Associate (p 144); Mechatronic Engineer (p 144); Quality Assurance Inspector (p 314).

Mechanical Engineering Associate

Mechanical engineering associates assist mechanical engineers and engineering technologists with the design, manufacture, construction, operation and maintenance of machines, manufacturing equipment, mechanical installations and mechanical facilities. They usually have a range of duties carried out under the direction of mechanical engineers and engineering technologists.

Mechanical engineering associates:

- collect and analyse data, carry out complex calculations and prepare diagrams
- organise and supervise the manufacture, operation and maintenance of plant machinery and equipment such as engines, air conditioners and other mechanical equipment
- assemble and install new or altered mechanical equipment, parts, machine tools and controls, and help to construct, maintain and repair engineering machinery
- perform or direct field or laboratory testing and analysis of results
- estimate machinery requirements and material costs and quantities
- produce designs, detailed drawings and documentation, manually or with the aid of computer-aided design (CAD), under the direction of mechanical engineers and technologists
- make sure that designs and finished work comply with the required specifications, regulations and contracts
- select tools and equipment
- organise and supervise inspection and maintenance of machinery and plant.

Mechanical engineering associates work in offices, technical laboratories, workshops or on site. They work in teams, usually reporting to engineers or technologists, supervising technicians and tradespeople.

Personal Requirements

- Enjoy technical and engineering activities
- Interested in machinery design and application
- Able to identify, analyse and solve problems
- Good oral and written communication skills
- Aptitude for computing and design

Education and Training

To become a mechanical engineering associate you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Employment Opportunities

Mechanical engineering associates are employed in the manufacturing industry as well as by architectural and technical (engineering consultancy) services, and in the electricity, gas, water and minerals industries. Most work is located in metropolitan areas.

Firms vary in size from small operations to large government enterprises. Many people in this occupation work on a contract basis and can be very mobile. A major area of employment is engineering drafting.

There are opportunities for promotion to positions managing design teams or whole drawing offices. With ability and the completion of further courses of study, associates may diversify into other areas of production engineering and/or management. With further training and experience, it is possible to become a fully qualified engineer.

Related Jobs

Marine Engineer (p 142); Refrigeration and Air Conditioning Draftsperson (p 315).

Mechatronic Engineer

Mechatronic engineers design and maintain machinery with electronic and computer control systems, such as aircraft, robots, motor vehicles, cameras, power generators and mining and chemical plant machinery.

Mechatronic engineers:

- design, develop, maintain and manage high-technology engineering systems for the automation of industrial tasks
- apply mechatronic or automated solutions to the transfer of material, components or finished goods
- apply advanced electronic control systems, which are usually computer-driven
- design and assist with the manufacture of consumer products such as cameras and video recorders
- apply electronic and mechanical processes and computers to tasks where the use of human labour may be dangerous (underwater exploration, mining or forestry, for example)
- carry out studies into the feasibility, cost implications and performance benefits of new mechatronic equipment.

Workplaces range from laboratories and processing plants to engineering design offices.

Personal Requirements

- Enjoy technical and engineering activities
- Good communication skills
- Able to work as part of a team
- Able to think creatively and problem solve
- Interested in mathematics, physics and mechanical equipment, such as robotic and production equipment

Education and Training

To become a mechatronic engineer you usually have to study engineering at university with a major in mechatronics or robotics. Related degrees in electronics, electrical or mechanical engineering may also be appropriate. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Mechatronic engineers are employed in firms where it is necessary to design and maintain automatic equipment. This includes a variety of industries, such as manufacturing, mining, aviation, robotics, defence and transport. Some mechatronic engineers are employed by large manufacturing companies that are involved in high-volume production.

New opportunities are becoming available due to technological advances. Mechatronic engineering can lead to management positions, including project management. Mechatronic engineers have broad multidisciplinary skills, so they are able to move into more traditional engineering disciplines.

Related Jobs

Aircraft Maintenance Engineer (p 137); Electronics Engineer (p 140); Mechanical Engineer (p 143).

Metallurgist

Metallurgists research, control and develop processes that are used in extracting minerals from ore (rock) for refining metals.

Metallurgists:

- apply physical and chemical methods to separate valuable minerals from their ores
- design processes to separate valuable minerals from ores and to reduce minerals to metals and alloys
- design and operate plants to produce concentrated mineral products and metals
- supervise sampling from various stages of processing for laboratory analysis and testing
- modify and develop processes to improve recovery and quality as well as to reduce waste and costs
- develop and operate processes to meet environmental requirements
- supervise a team of metallurgists, technicians and other workers
- advise operators on production methods and quality control systems
- communicate with other professionals (such as geologists, mining engineers, chemists, administrators and managers) to improve efficiencies
- control expenditure and prepare budgets and technical reports.

Metallurgists work at mines, mineral processing sites, laboratories, research centres or offices. They usually work with other professionals such as mining or construction engineers, geologists, mineralogists, technicians and tradespeople.

Personal Requirements

- Enjoy technical and engineering work
- Willing to adhere to safety requirements
- Able to identify, analyse and solve problems
- Good oral and written communication skills
- Practical and creative
- Able to work independently or as part of a team
- Able to accept responsibility

Education and Training

To become a metallurgist you usually have to complete a degree in metallurgical or chemical engineering, or science with a major in metallurgy. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Metallurgists are employed in production, research and technical sales in companies that mine and process metals, as well as in related research organisations such as the Commonwealth Scientific and Industrial Research Organisation (CSIRO). They are also employed by government departments. Some metallurgists find employment in educational institutions, as well as in marketing and technical sales for companies dealing in metal products and coated products.

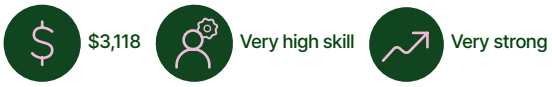
After several years of experience, metallurgists may move into middle or senior-level management positions. Others form their own companies that provide advice to companies and firms involved in metal production.

Demand for metallurgists is dependent on the level of activity in the mining, metals and materials manufacturing industries.

Related Jobs

Chemist (p 235); Engineering Tradesperson - Fabrication (p 293); Geological Engineer (p 238); Materials Engineer (p 143); Mining Engineer (p 145).

Mining Engineer



Mining engineers plan and direct the engineering aspects of extracting mineral resources from the earth.

Mining engineers:

- conduct investigations of mineral deposits and undertake evaluations in collaboration with geologists, other earth scientists and economists to determine whether the mineral deposits can be mined profitably
- determine the most suitable method of mining the minerals, taking into account factors such as the depth and characteristics of the deposit and its surroundings
- prepare the layout of the mine development and the procedure by which the minerals are to be mined
- prepare plans for mines, including tunnels and shafts for

underground operations, and pits and haulage roads for open-cut operations, using computer-aided design (CAD) packages
- plan and coordinate the employment of mining staff and selection of equipment with regard to efficiency, safety and environmental conditions
- talk to geologists and other engineers about the design, selection and provision of machines, facilities and systems for mining, as well as infrastructure such as access roads, water and power supplies
- coordinate with the operations supervisor to ensure proper implementation of plans
- operate computers to assist with calculations, prepare estimates on the cost of the operation and control expenditure when mines begin production
- oversee the construction of the mine and the installation of the plant machinery and equipment
- ensure that mining regulations are observed, including the proper use and care of explosives, and the correct ventilation to allow the removal of dust and gases
- conduct research aimed at improving efficiency and safety in mines
- establish first aid and emergency services facilities at the mines.

Mining engineers may work on site in remote areas. They often work for international companies and may travel or work overseas.

Personal Requirements

- Enjoy technical work
- Willing to adhere to safety requirements
- Able to identify, analyse and solve problems
- Good oral and written communication skills
- Aptitude for computing and design
- Practical and creative
- Able to work independently or as part of a team
- Able to accept responsibility
- Able to think and act decisively

Education and Training

To become a mining engineer you usually have to complete an engineering degree at university with a major in mining or geotechnical engineering. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Graduates may be eligible for membership of the Australasian Institute of Mining and Metallurgy (AusIMM) and Engineers Australia. Some courses are also recognised by AusIMM. Visit their websites for more details.

Registration or licensing may be required. Contact AusIMM for further information.

Graduates are permitted to sit for the Mine Manager's Certificate and to apply for registration as a Chartered Professional Engineer with Engineers Australia after three years of approved industry experience and with AusIMM after five years.

Employment Opportunities

Mining engineering degrees include elements from other disciplines such as geology, metallurgy, commerce, economics and management. This means that graduates are versatile and have the potential to advance rapidly within the minerals and associated industries.

Most mining engineers are employed by mining companies, mining contractors, consultants and government departments. They may also work for companies that manufacture and supply mining machinery or explosives to the mining industry. Mining engineers with wide experience may set themselves up as consulting engineers.

Employment may also be found in mine supervision and management, on site or in head office planning and services. Mining engineers have skills that are readily transferable between employers and may find work interstate.

Related Jobs

Chemical Engineer (p 137); Civil Engineer (p 138); Environmental Engineer (p 141); Geological Engineer (p 238); Geologist (p 239); Geophysicist (p 240); Mathematician (p 242); Metallurgist (p 145); Petroleum Engineer (p 147); Surveyor (p 46).

Naval Architect

$2,155 | Very high skill | Very strong

Also known as Maritime Engineer , Ocean Engineer and Offshore Engineer

Naval architects design and oversee the construction, survey and repair of marine craft and floating structures, including naval craft, passenger and cargo ships, submarines, high-speed ferries and catamarans, tugs, boats, yachts and oil rigs. Naval architects may specialise in structure and design, management, cost calculations, manufacturing processes, research, mechanical practices, hydrodynamics and hydrostatics, stability, propulsion or systems engineering.

Naval architects:

- prepare preliminary designs by consulting with clients such as ship owners, ship builders, shipping organisations and maritime research institutes
- estimate the initial vessel construction costs and lifetime running costs of a vessel
- determine the most suitable type and size for a vessel and ensure proposed designs meet performance and cost requirements
- determine the proportions and shape of the hull (body) of the vessel
- design accommodation and cargo areas
- make calculations relating to the structural and mechanical aspects of design, construction and repair
- make calculations relating to the stability of the vessel and prepare the stability book to go on board the vessel to be used by the master and officers
- supervise other people who prepare detailed designs, specifications and building contracts
- coordinate the work of other engineers
- obtain plan approval and supervise construction work
- plan, supervise and evaluate dockside and sea trials of the vessel

- survey vessels
- organise repairs and modifications to vessels
- research efficient ways for vessels to move through water
- provide risk assessment and claims management for insurance.

They work in a variety of settings from drawing offices to shipyards and on board for sea trials.

Personal Requirements

- Enjoy technical and engineering activities
- Aptitude for mathematics and physics
- Good oral and written communication skills
- Aptitude for computing and technical design
- Practical and creative ability
- Able to work independently or as part of a team
- Able to accept responsibility
- Interested in the marine environment

Education and Training

To become a naval architect you usually have to complete a degree in engineering with a major in naval architecture. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of mathematics, physics and chemistry are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Students and graduates can apply for membership of Engineers Australia and the Royal Institution of Naval Architects (RINA). RINA offers student membership, as well as information and guidance on how to become a chartered professional naval architect. Visit their websites for further information.

Employment Opportunities

Naval architects can be employed in naval architecture consultancies, shipyards, international ship classification societies, boat and shipbuilding firms, boat and ship repair and maintenance companies, port and harbour authorities, shipping lines and offshore engineering oil and gas companies.

Opportunities may also exist with mining companies engaged in offshore exploration and manufacturers of marine auxiliary machinery, navigational aids and communications equipment.

Related Jobs

Civil Engineer (p 138); Electrical Engineer (p 139); Intelligence Analyst (p 156); Marine Engineer (p 142); Marine Surveyor (p 305); Materials Engineer (p 143); Mechanical Engineer (p 143).

Petroleum Engineer

Also known as Engineer - Petroleum

Petroleum engineers plan and manage the recovery of oil and gas from petroleum reservoirs. The petroleum engineering profession offers a number of specialisations, with the major areas including drilling engineering, formation evaluation, production engineering and reservoir engineering.

Petroleum engineers:

- study geological and geophysical information to determine what type of drilling equipment and method of drilling would be the most efficient and cost effective, as well as plan the locations for drilling
- assist in estimating the economic potential of oil and gas reserves by directing the testing of boreholes
- identify the liquids or gases contained, the rate at which they can be recovered and the temperatures and pressures that need to be dealt with
- determine the best way to develop oil and gas reserves and to maximise recovery and profit
- determine methods of controlling the flow of oil or gas from wells and keep records of production
- plan ways to transport the oil and gas reserves from the seabed, including the use of downhole pumps and gaslift systems
- study operating equipment, environmental problems and the treatment of oil to remove sediment and water
- conduct operations and activities in accordance with environmental policies and codes
- work safely and use any equipment provided for health and safety purposes
- monitor the necessary safety procedures and facilities for personnel working on the project.

Petroleum engineers work closely with people from other disciplines such as geologists and geophysicists.

They may work in remote areas.

Personal Requirements

- Enjoy technical and engineering activities
- Willing to contribute and adhere to the safety requirements of an operation
- Able to identify, analyse and solve problems
- Good oral and written communication skills
- Aptitude for computing and design
- Practical and creative
- Able to work without supervision
- Able to accept responsibility

Education and Training

To become a petroleum engineer you usually have to study engineering at university with a major in petroleum engineering. You may also consider related specialisations such as chemical, civil, mechanical or mining engineering. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Graduates may be eligible for membership of Engineers Australia. Visit their website for more details. Registration or licensing may be required. Contact the Society of Petroleum Engineers for further information.

Employment Opportunities

Petroleum engineers are employed by oil and gas production companies and oil industry service contractors. Employment opportunities for petroleum engineers exist with major oil and exploration companies, contracting firms and government. Petroleum engineers may work on site in oil fields, production centres and in the head office of companies that are based in metropolitan areas. They may also work as consultants to the industry. Petroleum engineers may rise to managerial positions in the oil and gas industry.

Related Jobs

Environmental Engineer (p 141); Geological Engineer (p 238).

Pilot

$2,558

Very high skill

Moderate

Pilots fly various types of aircraft, including light planes, helicopters or airline aircraft, depending on the aircraft type they are approved to fly. They may transport passengers, mail and freight within Australia, internationally on scheduled airline and unscheduled charter services, or provide other aviation services as required.

Pilots:

- prepare flight plans based on weather forecasts and operational information
- make sure aircraft are properly loaded for a safe and efficient flight
- check fuel requirements and quantities prior to flight
- check on the maintenance status of aircraft prior to flight
- conduct checks of flight controls, instruments and aircraft engines
- fly aircraft according to established operating and safety procedures under a range of flight conditions, including extreme weather and emergency situations
- provide passengers with information and weather details.

Pilots' duties vary according to the size and nature of the company they work for.

Personal Requirements

- Good eyesight (may be corrected)
- Able to make accurate judgments quickly and remain calm in an emergency
- Able to use information from various sources and make decisions
- Able to speak, write and understand English

Education and Training

To become a pilot you have to complete a number of licences involving practical and theoretical training. The practical component is undertaken with a qualified pilot or instructor, with flight training available from private flight training schools. You can check the Civil Aviation Safety Authority (CASA) website to find private flying schools in your area. You can also become a pilot by completing a VET qualification in aviation. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you complete a degree in aviation, aviation technology or science, majoring in aviation. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics and physics are normally required. Applicants may also be required to submit an Aviation Reference Number, complete a questionnaire, attend a selection interview and obtain a Class 1 CASA Medical Certificate. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

The precise requirements (such as aeronautical experience and examinations or tests) for the issue of pilot licences are contained in the CASA regulations, which can be viewed at any licensed flying school or through the CASA website.

Employment Opportunities

There is considerable competition for all types of employment for pilots, particularly with commercial airlines. Promotions depend on experience and the licences held. To obtain employment, pilots may need to move to a major city or regional centre or be prepared to be away from home for extended periods.

Major employers include commercial airline companies, agricultural services, aerial surveying services, aeromedical services such as the Royal Flying Doctor Service and government agencies such as the police, forests and national parks and Customs Coastwatch. The Australian Defence Force employs Navy Helicopter Pilots to fly front-line rotary aircraft from naval bases that are on-shore or at sea.

Airlines recruit experienced commercial pilots who meet the minimum requirements direct from the general aviation industry, usually either fully qualified pilots with an Air Transport Pilot Licence (ATPL) or a Commercial Pilot with ATPL theory subjects passed. Check with individual airlines for full details.

Related Jobs

Air Force Officer (p 150); Aircraft Maintenance Engineer (p 137).

Telecommunications Engineer

$2,279

Very high skill

Very strong

Also known as Telecommunications Field Engineer

Telecommunications engineers plan, design, construct and install complex telecommunications networks and associated broadcasting equipment.

Telecommunications engineers:

- commission, install and test voice and data optical communication networks
- provide specialist technical support in monitoring and administering large telecommunications optical networks
- install and maintain internet protocol (IP) based optical network telecommunications equipment
- install and test simple IP devices in convergence networks
- develop project management plans
- plan the development of core and access network capabilities
- analyse demand data, and evaluate and forecast network growth
- implement convergence technologies
- design and manage telecommunications and information technology (IT) networks
- diagnose problems and provide network management support
- plan a project from a design specification
- research and analyse the key concepts in design.

Telecommunications engineers have a broad role that requires in-depth technical knowledge of appropriate equipment and services and extensive experience within the telecommunications industry.

Specialisations

- Telecommunications Network Planner and Designer
- Telecommunications Optical Network Specialist

Personal Requirements

- Able to identify, analyse and solve problems
- Enjoy mathematical and technical activities
- Good communication and organisational skills
- Able to work independently and accept responsibility

Education and Training

To become a telecommunications engineer you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a telecommunications engineer by completing a degree in engineering at university with a major in telecommunications or telecommunication and network engineering. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Telecommunications engineers may require certification to work on particular networks and with certain types of telecommunications technology. In order to carry out cabling work, you must be registered with an Australian Communications and Media Authority accredited registrar. see www.acma.gov.au for more details.

Students and graduates may be eligible for membership of Engineers Australia. see www.engineersaustralia.org.au for more details.

Employment Opportunities

The telecommunications industry is subject to continuing and rapid technological change. Telecommunications engineers are employed by a variety of small, medium and large enterprises. These include large telecommunications carriers and their contractors, network and exchange equipment suppliers, customer premises equipment suppliers and installation or maintenance service providers.

Related Jobs

Data and Telecommunications Cable Worker (p 287); Electronics Engineer (p 140); Telecommunications Technician (p 324).

Government & public service

Are you community-minded, great with people and enjoy complex problem-solving? Careers in government and public services are varied, but almost all required this skillset. Working in this field could see you doing anything from administrative work to flying combat planes – all with the objective of protecting or serving your community.

Courses and specialisations

The following are just some of the specialisations available: border force, postal service, police, local government and many roles within the defence force (army, navy or military). Study requirements vary widely, from certificates to bachelor degrees and beyond. Refer to individual career descriptions for specific education requirements.

Where to study

Many occupations in this sector, such as intelligence officer or park ranger, require formal tertiary qualifications. However, careers such as public service and border force offer on-the-job training. Careers in firefighting and the Police and Defence Forces offer specialised industry training, and candidates must pass a series of aptitude tests and medical tests to gain entry. Entry to these programs can be extremely competitive and some may be accepted after several years of applying.

Please note: University ratings have not been included for careers in government & public services due to careers being varied in nature and largely vocationally oriented.

Air Force Officer

Also known as Fighter Pilot , RAAF Officer and SAS Soldier

Air Force officers command, train and motivate Air Force airmen and airwomen for peacetime and wartime tasks. Air Force officers work at the middle and executive management levels within the Royal Australian Air Force (RAAF), with officers specialising in various areas depending on their training and qualifications.

An Air Force officer may specialise as:

- Air Combat Officer (Mission Aircrew) - use radar systems to detect enemy targets and perform surveillance missions in areas of battle management, combat and maritime patrol.
- Airfield Engineer - manage, assess, repair and maintain the operation of Air Force infrastructure and engineering services.
- Dentist – assess, diagnose and treat dental conditions and maintain the oral health of Air Force personnel.
- Doctor - provide healthcare to Air Force personnel in RAAF hospitals, at first aid posts or during emergency situations such as aeromedical evacuations.
- Ground Defence Officer – defend Air Force airfields, assets and personnel from ground attack, command ground defence squadrons and conduct various types of defence training.
- Air Traffic Controller (Mission Controller) - manage the safe movement of military and non-military aircraft in the domestic environment, assisting with flight coordination and aircraft control during combat.
- Nurse – responsible for the medical needs of Air Force personnel and assist doctors with medical procedures in RAAF hospitals, remote locations or during aeromedical evacuations.
- Pilot - fly combat and support aircraft on a variety of missions and roles, conduct flying lessons and carry out planning and administrative duties.

Personal Requirements

- Meet aptitude, physical fitness and medical requirements
- Willing to accept responsibility
- Ability to lead and motivate others
- Willing to serve anywhere in Australia or overseas
- At least 17 years of age
- Australian citizenship

Education and Training

To become an Air Force officer you usually have to gain your Senior Secondary Certificate of Education with passes in English and three other broad subjects.

To join the RAAF you will need to successfully complete a series of aptitude tests, medical assessments and selection interviews.

If you are successful, there are four different education and training pathways for Air Force officers. You may apply to join the Air Force as a non-degree, direct-entry officer cadet; you

may complete a degree through the Australian Defence Force Academy (ADFA); you may apply as a sponsored undergraduate; or you may apply after completing one of a selected range of specialist degrees. Entry to all officer cadet positions requires the completion of the 17-week Initial Officer Course at RAAF Base East Sale, Gippsland, Victoria. This is followed by specialist training with the RAAF.

Additional Information

To enter ADFA, you must be at least 17 years of age and have satisfied entry requirements for a relevant degree at the University of New South Wales or equivalent.

Employment Opportunities

Recruitment into the Australian Defence Force is conducted on an Australia-wide basis all year round.

Related Jobs

Air Force Trades (p 151).

Air Force Trades

Also known as RAAF Technical and Trade

Air Force technicians and tradespersons undertake a variety of technical and trades-related jobs in the Air Force, including assisting with the construction and maintenance of Air Force equipment and buildings.

Air Force technicians and tradespeople may specialise as:

- Aircraft Safety Equipment Maintainer – manufacture, inspect, repair and test all aeronautical safety and life support equipment.
- Aircraft Technician – inspect, install, repair and maintain structural components of all military aircraft and air frame systems.
- Carpenter - design, construct, maintain and repair all non-aircraft buildings and equipment, from site planning and excavation to tiling and glazing.
- Electrician - install, maintain and repair power and lighting systems for both industrial and domestic conditions, and manage the operation of electrical plant and equipment.
- Fitter and Turner (Ground Mechanical Engineering Fitter) – maintain and repair machinery, equipment and systems through diagnosing faults and manufacturing or modifying tools and fixtures.
- Motor Mechanic (Ground Support Equipment Technician) - maintain motor transport vehicles, ground support equipment, various aircraft systems, refuelling equipment and installations.
- Plumber - install, maintain and repair Air Force water systems, including sanitary and sewerage systems, roofing, guttering, hot water systems and gas appliances.

Personal Requirements

- At least 17 years of age
- Able to pass applicable medical, physical fitness and aptitude tests
- Willing to accept responsibility
- Enjoy leading and motivating others
- Willing to serve anywhere in Australia or overseas
- Australian citizenship

Education and Training

To work in a trade within the Air Force, you will need to complete Year 10 with passes in English, mathematics and science. Some specialisations require you to have an existing trade or technical qualification.

To join the Air Force you will also need to successfully complete a series of aptitude tests, medical assessments and selection interviews. All new recruits are required to undertake basic Air Force training at RAAF Base Wagga, in Wagga Wagga, NSW, prior to commencing employment training in their chosen job role. Trade qualifications obtained in the Royal Australian Air Force (RAAF) are nationally recognised.

Becoming an aircraft life support fitter, aircraft structural technician or a ground support equipment technician involves additional Air Force training. The duration of this training varies for each specialisation and may require interstate travel.

Employment Opportunities

Recruitment into the Australian Defence Force is conducted on an Australia-wide basis all year round.

Related Jobs

Army Trades (p 153); Engineering Tradesperson - Mechanical (p 293).

Army Officer

Army Officers command, train and motivate soldiers in one of many military specialisations. They are the leaders and managers of the Army, working at the middle and executive management level.

An Army Officer may specialise as:

- Armoured Officer - take command of Soldiers operating high-tech mobile weapon systems such as tanks and armoured vehicles; using the skills gained through training.
- Artillery Officer – take command of artillery delivery by providing fire support, systematic surveillance, target acquisition and ground-based air defence.
- Helicopter Pilot – fly Army rotary wing aircrafts on a variety of complex missions ranging from combat to disaster relief.
- Catering Officer – manage the catering logistics and trained chefs that deliver nutritious meals in barracks and on deployments.
- Electrical and Mechanical Engineer – take responsibility for the maintenance of hardware ranging from tanks to watercraft and weapon systems.
- Engineering Officer – manage a team constructing and maintaining roads, bridges, airfields and military defences.
- Infantry Officer – take command of a highly trained combat team operating in diverse and challenging environments.
- Intelligence Officer – manage the acquisition and dissemination of military intelligence on strategy and combat tactics.
- Health Officer – coordinate the health planning and leadership of health capabilities on exercises and operations.
- Military Police Officer – plan, execute and command military policing functions such as law enforcement, mobility and manoeuvre support, security and internment operations.

- Ordnance Officer – responsible for supply chain management, logistical support and issuing of Army equipment.
- Signals Officer – manage the teams responsible for communications, information systems, cyberspace operations and electronic warfare support to the Army.
- Transport Officer – manage complex logistical operations in delivering the Army's fuel, ammunition, equipment and provisions; by road, rail, air and sea.

Personal Requirements

- Good organisation skills
- Leadership and management qualities
- Good interpersonal and communication skills
- Meet aptitude, physical fitness and medical requirements
- Completion of Year 12 with passes in English and three other approved subjects
- At least 17 years of age
- Australian citizenship

Education and Training

To become an Army Officer you require your Senior Secondary Certificate of Education with passes in English and three other tertiary entry units, preferably including mathematics and a science unit.

To join the Army you will need to meet the eligibility requirements and attend a YOU Session and an Assessment Day before sitting an Officers Selection Board.

There are four different education and training pathways to become an Army Officer. You may apply to join the Army as a direct entry officer cadet; complete a degree through the Australian Defence Force Academy (ADFA); apply as a sponsored undergraduate through the Defence University Sponsorship; or you may apply after completing one of a selected range of specialist degrees.

Entry as a direct officer cadet requires the completion of 18 months of training at the Royal Military College, Duntroon, ACT. This is followed by specialist training with the Army.

Entry to ADFA requires you to gain your Senior Secondary Certificate of Education with an appropriate score in prerequisite subjects relevant to your chosen area of study. All ADFA students are required to complete a 3 or 4-year course of academic study at ADFA, followed by a year of military training.

The Defence University Sponsorship is available to students pursuing an engineering or health discipline at a recognised tertiary institution. Sponsorship is available to undergraduate and graduate students. Undergraduates must have completed one or two years of their degree before sponsorship can commence. Graduate students must have already obtained a relevant undergraduate degree before being eligible to be sponsored for the graduate medical or dental program. Following completion of their specialised degree, they are appointed as Specialist Service Officers.

People who already have specialised degrees may also apply for direct entry into the Army as Specialist Service Officers. Before becoming fully operational in their specialised field, these applicants are required to complete a 32-day Specialist Service Officer First Appointment Course at the Royal Military College, followed by specialised employment training. Please note that entry requirements will depend on the specialised occupation.

Additional Information

To enter ADFA, you must satisfy entry requirements for a relevant degree at the University of New South Wales or equivalent. As it is a competitive process, it is recommended that you apply in Year 11.

Year 11 students who apply to ADFA may be eligible for an ADFA Education Award. The Education Award is presented annually to Year 12 students in recognition of outstanding achievement shown during the ADFA entry recruiting process.

Employment Opportunities

Recruitment into the Australian Defence Force is conducted on an Australia-wide basis all year round.

Related Jobs

Air Force Officer (p 150); Army Soldier (p 152); Army Trades (p 153); Electrical Engineer (p 139); Navy Officer (p 157); Police Officer - Australian Federal Police (p 160); Police Officer - State (p 161).

Army Soldier

Also known as Soldier

As a Soldier, you'll have the opportunity to serve in a variety of roles. With over 50 roles to choose from, you can serve as a tank driver, infantry soldier or also work in administration, transport, trades, aviation, logistics or communications.

Army soldiers:

- operate and maintain a wide variety of military equipment
- participate in classroom lectures and field training in the areas of navigation, field craft, administration, vehicle maintenance, computer skills and leadership.An army soldier can specialise in these broad categories

Army soldiers can be posted to capital or regional cities throughout Australia and can expect to serve in a variety of units and formations throughout their careers. Army soldiers may travel nationally and possibly internationally whilst in the Army.

Personal Requirements

- At least Year 10 completion with passes in English and Maths
- Sufficient general fitness to pass a pre-entry fitness assessment
- Some roles requires a valid probationary license or higher
- At least 17 years of age
- Australian citizenship

Education and Training

To become an Army soldier you have to complete Year 10 or equivalent with passes in English and mathematics. As a part of the application process, you will need to attend a YOU Session, Assessment Day and pass your pre-entry fitness assessment.

Following your appointment in the Army, you will need to undertake specific Army training. This involves a 12-week recruit course with the 1st Recruit Training Battalion at Kapooka, near Wagga Wagga in NSW. Completion of this course is followed by specialised training for particular jobs. Specialisations have different entry requirements, contact Defence Force Recruiting for specific requirements.

Employment Opportunities

Recruitment into the Australian Defence Force is conducted on an Australia-wide basis all year round.

Related Jobs

Army Trades (p 153); Navy Sailor (p 158); Police Officer - Australian Federal Police (p 160); Police Officer - State (p 161).

Army Trades

Army Trades undertake a wide range of tasks for the Australian Army, including the construction, maintenance and repair of Army equipment in Australia and overseas.

Army Trades can specialise as:

- Aircraft Technicians – responsible for inspecting, testing, repairing, rebuilding, refurbishing, modifying and recovering Army aircraft airframes, engines and equipment.
- Avionics Technicians – work with the latest tools and equipment in modern workshops and hangars, maintaining the circuity and systems that control helicopters and the unmanned aerial vehicles used for battlefield surveillance.
- Electronic Systems Technicians – inspect, maintain and repair the electronic and communication equipment that supports combat capability.
- Fitter Armaments – inspect, repair, modify and recondition military armaments, watercraft and small engines, and perform general engineering tasks.
- Vehicle Mechanics – repair and maintain modern, military-grade machinery.

Army Trades work in tight-knit teams across Army Units and workshops across Australia and overseas.

Personal Requirements

- At least Year 10 completion with passes in English and Maths
- Sufficient general fitness to pass a pre-entry fitness assessment
- Some roles require a valid probationary license or higher
- At least 17 years of age
- Australian citizenship

Education and Training

To work within Army Trades you have to complete Year 10 or equivalent with passes in English, mathematics, science (with physics content preferred) and one other subject.

As a part of the application process, you will need to attend a YOU Session, Assessment Day and pass your pre-entry fitness assessment. Following selection for employment with the Army, you will need to undertake specific Army training. This involves new recruit training at Kapooka, near Wagga Wagga, NSW. This is followed by specialised training for your chosen role.

This training varies according to your chosen speciality, lasting up to two years, followed by a maximum of two years of on-the-job training in Army units or with civilian organisations. Training is followed by a period of service in the Army. Training is provided at either the RAAF School of Technical Training at Wagga Wagga in NSW, or the Army Logistic Training Centre at Bonegilla in Victoria.

Employment Opportunities

Recruitment to the Australian Defence Force is conducted on an Australia-wide basis all year round.

Related Jobs

Air Force Trades (p 151); Army Officer (p 151); Carpenter (p 282); Engineering Tradesperson - Mechanical (p 293).

Border Force Officer

Also known as Customs Officer

Border Force officers manage the security and integrity of Australia's borders. They mainly work at international airports, seaports or outposts along the Australian coastline. Border Force officers check passengers and crew before clearing them for entry into Australia. They check international mail, passenger luggage and other cargo of ships and aircraft to prevent the illegal entry into Australia of prohibited, quarantined or dutiable goods.

Border Force officers:

- process and assess risk levels of all passengers and crew entering or leaving Australia
- board ships and aircraft to check compliance with regulations and search for undocumented cargo and people or prohibited goods
- check documents, examine luggage and clear goods for import or export
- seize and destroy prohibited imports
- respond to public and industry enquiries
- engage with clients, travelers and the general public
- collect tariffs and duty, and refund GST to tourists
- monitor security in Border Force controlled areas, including wharves and airport tarmac areas
- perform administrative work as required.

Border Force officers are multiskilled and usually work as part of a team or under general supervision. Most officers work closely with the public and related industry personnel. During initial training and in the early stages of their careers, officers can expect to be moved through a number of different areas. This may include periods of transfer to different locations around Australia depending on operational requirements. Some work areas require shiftwork and overtime.

Personal Requirements

- Good communication and interpersonal skills
- Flexible and resourceful
- Good organisational and planning skills
- Able to work as part of a team
- Courteous and efficient
- High ethical standards
- Able to deal with increasingly sophisticated technologies
- Able to pass a medical and fitness examination
- Able to satisfy security requirements
- At least 18 years of age
- Australian citizenship

Education and Training

There are a number of entry pathways into the Border Force. This includes entering as a Border Force Recruit, a graduate trainee or through general recruitment. You can work as a Border Force Recruit without formal qualifications. To enter the Border Force Recruit program you must be over 18, hold or be willing to obtain a drivers licence, be an Australian citizen and undergo medical, fitness and security assessments. Training is provided on the job, with successful applicants undertaking a 12-month recruit training program before becoming a Level 3 officer. To become a graduate trainee you need to complete a three-year or equivalent bachelor degree at an Australian university.

Graduate trainees are introduced to a diverse range of work within the organisation through an intensive 10-month training program. The program includes rotational work placements

and formal training. General 'above base' recruitment entry is available to individuals applying for specific roles, based on their previous experience and qualifications.

To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

The Border Force participates in the Australian Public Service Commission's Indigenous Pathways program to engage entry-level Indigenous Cadetships and Indigenous graduates. An entry-level recruitment program is also available specifically for Torres Strait Islanders to join the National Marine Unit for 12 months as seagoing crew.

Employment Opportunities

All available positions are advertised based on operational requirements on the Border Force website or through the Australian Public Service website (www.apsjobs.gov.au).

Related Jobs

Customs Broker (p 55); Intelligence Analyst (p 156); Police Officer - Australian Federal Police (p 160); Public Servant - Australian Public Service (p 163).

Correctional Officer

Also known as Custodial Correctional Officer and Prison Officer

Correctional officers are responsible for the custody, care, supervision, welfare and rehabilitation of prisoners in prisons and correctional centres. Correctional officers may specialise in areas such as dog squads, prison industries, offender programmes and field supervision of offenders on worksites outside the prison.

Correctional officers:

- search prisoners and cells for illegal/prohibited items
- lock prisoners in cells
- observe the conduct and behaviour of prisoners to maintain control, discipline and security within the correctional centre
- advise if prisoners need special care, such as a visit to a psychiatrist, psychologist or social worker
- inspect doors, gates, grilles, locks, window bars and other security equipment, ensuring they are secure and functional
- supervise prisoners at all times of the day, including meal times, recreation periods, sport and work assignments
- patrol assigned areas and report to supervisors or other workers any breach of rules, unsatisfactory attitudes or adjustment problems of prisoners
- serve meals to prisoners confined to cells
- organise clothing, reading material, toiletries or other items needed by prisoners
- participate in the reception, induction and discharge of prisoners in accordance with procedures
- process, direct and observe visitors
- perform escort duties of prisoners, both within the prison and externally when required
- prepare a variety of reports, including admission and incident reports
- assist with the risk/needs assessment of prisoners and provide input into their case and sentence management
- provide leadership and act as a positive role model to assist the rehabilitation process
- help offenders seek rehabilitation and return to the community by providing basic case management support and supervision
- provide a timely response to emergencies or breaches of security
- provide first aid.

Correctional officers can be required to work shifts, including weekends and public holidays, and may be transferred anywhere within their state or territory. In some states, case management is an important aspect of their work. This gives individual officers the chance to work with small groups of 10 to 15 prisoners within a re-education and rehabilitation program.

Personal Requirements

- Enjoy working with people
- Normal vision
- Good interpersonal skills, including being fair, sensitive and patient
- Assertiveness and self-confidence
- Good written and verbal communication skills
- Empathy and cultural awareness
- A mature, responsible attitude towards managing people
- Able to resolve conflict and problems
- Able to cope with the physical demands of the job
- Able to stay calm in stressful situations
- Australian citizenship or permanent residency

Education and Training

You can work as a correctional officer without formal qualifications, but employers usually require Year 10. To gain employment, you will need to complete an initial assessment that includes a range of tests. A National Police Check may be required. If your application is successful, you will join the corrective services division in your state or territory and undertake further training.

Contact the corrective services department in your state or territory for further information.

Additional Information

Depending on your state or territory, you may need to meet additional requirements. This may relate to age, or holding a Provide First Aid Certificate, relevant clearances or an unrestricted drivers licence.

Employment Opportunities

Correctional officers are employed by the corrective services department in their state or territory. Prisons are located in both metropolitan and regional areas. Successful applicants commence as trainees and, on successful completion of pre-service training, commence employment as a correctional officer. With experience, and sometimes further training, correctional officers can progress to positions ranging from operational and managerial to project and specialist roles.

Related Jobs

Criminologist (p 186); Police Officer - Australian Federal Police (p 160); Probation and Parole Officer (p 162); Security Officer (p 318).

Firefighter

Firefighters control and extinguish fires, manage hazardous incidents, provide education to the community in fire prevention techniques and protect life, property and the environment.

Firefighters:

- respond to emergency calls regarding fires, vehicle accidents, rescues and other emergency situations
- undertake activities designed to prevent fires and help communities prepare for emergency situations
- drive or crew firefighting appliances or other vehicles to fires or incident scenes
- provide support in response to natural disasters such as floods and cyclones
- operate pumps and spray foam or water from hoses, portable extinguishers or other appliances to extinguish fires, or to disperse or neutralise dangerous substances such as chemicals and petroleum
- rescue people stranded or trapped in dangerous situations or inaccessible places using ladders or elevating platforms, or by cutting openings in buildings or crashed vehicles to free occupants
- respond to industrial accidents
- administer first aid and oxygen therapy
- communicate with other emergency response personnel using radios, computers and other communication technology
- take part in ongoing training in firefighting techniques and professional development
- visit buildings to assess entry/exit points and locations of hydrants, identify potential fire hazards and ensure they comply with fire codes
- inspect and maintain firefighting equipment and hydrants
- undertake public education tasks, including school visits, demonstrations, first aid, firefighting training and lectures
- undertake administrative duties
- train industrial and volunteer firefighters.

Firefighters wear uniforms, breathing apparatus and other personal protective equipment when dealing with emergency incidents. They are required to work both day and night shifts in order to maintain a 24-hour service.

Personal Requirements

- Good communication skills
- Ability to follow directions
- Capacity to consistently demonstrate respect towards colleagues, the community and all others
- Well-developed interpersonal skills and the ability to work within and contribute effectively to, a small team working in close proximity
- Enjoy practical work
- Ability to exercise self-discipline and use sound judgement in ensuring assigned tasks are completed
- Capacity to acquire new skills and demonstrate a problem-solving ability
- Able to cope with physical demands
- Able to pass a medical examination
- Able to work under pressure
- Able to work at heights and in confined spaces
- Willing to undertake ongoing training and professional development

Education and Training

Minimum educational qualifications may vary from State to State. You will receive training on the job and through in-house training courses.

Applicants who meet the basic criteria must pass a range of clearances and assessments. This includes an interview, character reference check, National Police Check, medical examination and fitness assessment.

If you are successful, you will attend a training course. Durations vary between states and are followed by an extended period of training, study and assessment.

Contact the fire authority in your state or territory for more information.

Additional Information

Firefighters need to have Australian citizenship or permanent residency. You will be required have a current drivers license and undergo a National Police Check and medical examination.

Employment Opportunities

The major employers of firefighters are state and territory fire authorities. Applications are typically accepted through the year. Competition for available positions is very strong.

Federal and state public services and some large commercial and industrial organisations employ experienced firefighters as fire prevention officers. Local governments in rural locations employ firefighters as bushfire prevention officers.

Indigenous Community Liaison Officer

Also known as Aboriginal Community Liaison Officer , Aboriginal Community Police Officer , Aboriginal and Torres Strait Islander Community Liaison Officer , Community Constable , District Aboriginal Liaison Officer and Police Liaison Officer

Indigenous community liaison officers liaise with Indigenous communities and the state or territory police forces in order to establish and maintain positive relationships.

Indigenous community liaison officers:

- establish good communication between police and local Indigenous communities
- help determine disputes involving police and Indigenous communities
- advise and educate police officers on cross-cultural awareness
- advise police on potential crime and disorder areas and suggest ways to stop crime and misbehaviour
- improve community knowledge about policing services and law and order issues
- provide assistance to relatives visiting Indigenous prisoners
- assist police and Indigenous persons and their families involved in the juvenile justice process
- use appropriate police powers and prepare prosecution briefs.

Indigenous community liaison officers are required to work shifts, including weekends and public holidays, and may serve in urban and remote communities.

Indigenous community liaison officers usually have limited police powers, although in certain circumstances they may assist police officers with law enforcement tasks such as arrest, search and detainment. In Tasmania and WA, however, there is no separate Indigenous community liaison officer programme. Instead, fully sworn members of the police force perform this function specialising in the liaison role.

Personal Requirements

- Enjoy working with people
- Good communication and negotiation skills
- Of Aboriginal or Torres Strait Islander descent
- Of sound character
- Acceptable traffic/criminal record
- Medically and physically fit

Education and Training

You can work as an Indigenous community liaison officer in New South Wales, the Northern Territory, South Australia and Queensland without formal qualifications, but employers usually require Year 10. The Aboriginal community liaison officer positions are Indigenous-specific positions. Training is undertaken on the job and further study may be required. Training periods and requirements vary between the states and territories.

In Tasmania, Victoria and Western Australia, the role of police Aboriginal community liaison officer is performed by sworn officers of the police force and is not a separate occupation.

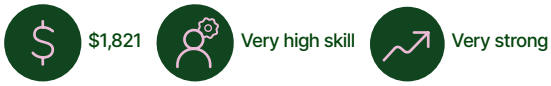
Contact the recruitment division of your state or territory's police department for further information.

Additional Information

People who have established good networks within Aboriginal and Torres Strait Islander communities are encouraged to apply.

Applicants will be required to undergo a National Police Check and hold a drivers licence.

Intelligence Analyst



Intelligence analysts evaluate information from a variety of classified and unclassified sources. This information is often incomplete, contradictory and can vary widely in terms of reliability.

Depending on their background and qualifications, an intelligence analyst may examine a diverse set of countries, issues (such as terrorism) and cultures.

Intelligence analysts working for the Department of Defence specialise in a number of areas depending on their training, qualifications and agency employment.

Intelligence analysts:

- collect and analyse various sources of intelligence to determine trends and make assessments
- prepare intelligence reports and briefs to inform senior government officials
- translate foreign language material
- communicate and cooperate closely with both military and civilian organisations.

Personal Requirements

- Excellent research, analytical and problem-solving skills
- Excellent written and oral communication skills
- Ability to work individually and as part of a team
- Ability to cope with the demands of working in a high pressure, classified environment
- Australian citizenship

Education and Training

To become an intelligence analyst you usually have to complete a degree in arts, science, commerce, information technology, engineering or a related field. To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Entry into graduate programs with the Department of Defence requires applicants to undergo a security clearance. The level of clearance will depend on the graduate program. Visit their website for further information.

Employment Opportunities

Graduate positions with the Department of Defence are based in Canberra, with limited positions also available in Bendigo, Victoria. Recruitment is conducted Australia-wide with applications opening in February each year. Positions may also be available with other agencies, including the Australian Security Intelligence Organisation (ASIO) and the Australian Secret Intelligence Service (ASIS). Other opportunities include employment as an Army Intelligence Analyst with the Australian Defence Force to provide intelligence and tactical support to military commanders.

Related Jobs

Geographic Information Systems Officer (p 83); Naval Architect (p 146); Public Servant - Australian Public Service (p 163).

Local Government Inspector

Local government inspectors are responsible for enforcing various council by-laws, parking and traffic regulations and provisions contained in the Local Government Act, and other legislation enforced by councils.

Inspectors:

- talk with people who dispute council actions
- issue notices to cut back or remove plant growth that overhangs footpaths and streets, as well as undergrowth from premises
- issue notices to people found littering
- patrol streets and parking areas to check that vehicles are legally parked (have not exceeded maximum parking times, for example)
- issue notices to people parking illegally
- provide information to the police about stolen or abandoned vehicles
- issue notices to people in violation of environmental protection regulations (such as lighting an incinerator outside specified times or illegally burning substances such as rubber)
- catch stray and unregistered animals and, if possible, notify owners
- follow up complaints, conduct interviews and issue penalty notices to animal owners who are in violation of the various acts and by-laws
- keep records of issued notices and payment of penalties

- attend court to give evidence in support of any prosecutions
- give timely and courteous advice to the community.

Duties performed by inspectors vary among councils depending on where the council is and the inspector's experience and training. For example, an inspector employed by a coastal council is likely to perform duties relating to provisions contained in the Coastal Protection and Boating Acts. In some councils, inspectors perform both traffic and general inspection duties.

Inspectors mainly work outdoors without direct supervision and may be required to wear a uniform. They may be required to work some evenings, weekends and public holidays, overtime or shifts. Inspectors have a considerable amount of contact with the public.

Personal Requirements

- Enjoy working outdoors and willing to work in all types of weather
- Able to deal politely and, at times, firmly with members of the public
- Good communication and conflict-resolution skills
- Mature and confident
- Patient, able to show initiative and be discrete
- Able to cope with the physical demands of the job

Education and Training

You can work as a local government inspector without formal qualifications. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a local government inspector through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

To work as a local government inspector, you may need to undergo a National Police Check and medical assessment. You may also need a drivers licence for cars and/or motorcycles. Contact your local council for further information.

Employment Opportunities

Inspectors may be employed on a full-time, part-time or casual basis within metropolitan and regional local government authorities.

Related Jobs

Park Ranger (p 158); Public Servant - State Government (p 163).

Navy Officer

$2,834 | Very high skill | Moderate

Navy officers manage, lead, train and take responsibility for maintaining the team spirit and safety of the Navy's non-commissioned officers and sailors.

A Navy officer may specialise as:

- Aerospace Engineer - maintain Navy helicopters and associated systems, specialising in either Aeronautics or Aircraft Electronics.
- Maritime Aviation Warfare Officer - the Mission Commander onboard a helicopter, strategising the helicopter's weapon and sensor systems, communications, navigation and more.
- Navy Pilot - fly Navy helicopters, leading search and rescue missions, evacuating medical emergencies from the scene of natural disasters, and intercept vessels engaging in illegal activity.
- Navy Lawyer (Legal Officer) - practice military and discipline law, civil and administrative law, and international and operations law in order to assist boards of enquiry; appear before court martials; and provide legal aid to Navy personnel.
- Marine Engineer - the ship's or submarine's technical expert. They work hands-on to manage the teams that maintain, operate and repair numerous systems.
- Navy Doctor (Medical Officer) - responsible for the general health of all Navy personnel and provide high standards of care under challenging conditions and with minimal medical support.
- Nursing Officer - responsible for the medical needs of all personnel and may become involved in specialist areas like perioperative or emergency care.
- Maritime Warfare Officer - take command as watchkeepers of advanced Navy ships and submarines, contributing to the defence of Australia.
- Maritime Logistics Officer - manage logistic support functions required by both vessels and Navy personnel, including replenishment, catering, financial accounting and business operations.
- Training Systems Specialist - responsible for developing and monitoring the design, quality control and delivery of training in the Navy.
- Electronic Engineer (Weapons Electrical Engineering Officer) - lead a team that works on and maintains complex technologies on ships or submarines including radar, sonar, communication, navigation, combat and weapons systems.

Personal Requirements

- Able to lead and motivate others
- Prepared to accept responsibility
- Meet aptitude, physical fitness and medical requirements
- Australian citizenship

Education and Training

To become a Navy officer you have to gain your Senior Secondary Certificate of Education with passes in English and three other tertiary-accredited subjects. To join the Navy you will need to successfully complete a series of aptitude tests, medical assessments and selection interviews.

If you are successful, there are four different education and training pathways for Navy officers: you may apply to join the Navy as a non-degree, direct-entry officer; complete a degree through the Australian Defence Force Academy (ADFA); apply as a sponsored undergraduate; or apply after completing a selected range of specialist degrees.

Entry to all degree and non-degree officer positions requires completion of the New Entry Officer Course at the Royal Australian Naval College, HMAS Creswell at Jervis Bay, NSW. This is followed by specialist training with the Navy.

Entry to ADFA requires you to gain your Senior Secondary Certificate of Education with an appropriate score in prerequisite subjects relevant to your chosen study. All ADFA students are required to complete a 3-year course of academic study at the Academy, incorporating the Academic Military Education and Training (AMET) program.

Defence University Sponsorship allows university students to apply for a role in the Navy while still studying for a degree at any accredited university in Australia. They can apply having completed at least one or two years of their degree, depending on its duration.

If accepted for sponsorship, they will join the Navy, then able to concentrate on their studies while enjoying a salary and many other benefits. On completion, they are guaranteed a job in the Navy.

People who already have specialised degrees may apply for direct entry into the Navy as Graduate Officers. These applicants are also required to complete the New Entry Officer Course before becoming officers in their specialised field.

Different specialised occupations have different entry requirements. For full details on this option, contact your nearest Defence Force Recruiting Centre.

Additional Information

To enter ADFA, you must be at least 17 years of age and have satisfied entry requirements for a relevant degree at the University of New South Wales or equivalent. Applications usually close in September of the year prior to entry.

Some specialisations may have additional age restrictions. Check the Australian Defence Force website for full details. Students who apply to ADFA during Year 11 may be eligible for the ADFA Education Award. The Education Award is presented annually to Year 12 students in recognition of outstanding achievement shown during the ADFA recruiting process.

Employment Opportunities

Recruitment into the Australian Defence Force is conducted on an Australia-wide basis all year round.

Related Jobs

Air Force Officer (p 150); Army Officer (p 151); Navy Sailor (p 158); Police Officer - Australian Federal Police (p 160); Police Officer - State (p 161); Ship's Officer (p 319).

Navy Sailor

Medium skill Stable

Navy sailors undertake a wide range of peacetime and wartime work on land and at sea, including communications, supply, seamanship, motor transport, combat systems operation, hospitality and stores.

A Navy sailor may specialise in the following areas:

- Acoustic Analyst Submariner - work in submarines to monitor the presence of vessels in the maritime environment. This is achieved by detecting and analysing noise patterns from unknown sources.
- Boatswain's Mate - perform general seamanship duties onboard Navy ships. They handle the berthing of ships, use ship's boats and small arms, and maintain the ship and its fixtures.
- Clearance Diver - responsible for military diving tasks, which may include underwater repairs; the securing and disposal of missiles, projectiles and explosives; and the safe demolition of maritime assets.
- Combat Systems Operator - work in the operations room with sensor equipment such as sonar and radar, providing combat data and operations planning support.
- Combat Systems Operator - Mine Warfare - operate the combat data system on board the Navy's minehunters, including underwater mine disposal vehicles, radars, sonars and navigation systems.
- Communication and Information Systems Operator - responsible for sending information into, out of and around a ship or base, using radio, satellite equipment and Local Area Networks.
- Chef - cater and prepare food for Navy personnel both on shore and in ships and submarines.
- Hydrographic Surveyor - work onboard Navy research vessels assisting in compiling data for hydrographic surveys of Australia's coastline and approaches.
- Medic - assist with patient care and comfort, hygiene and nursing care, and emergency medical and pre-hospital care of Navy personnel.
- Musician - perform in Navy bands at concerts, ceremonies, parades and dances, playing a range of musical styles, including classical pieces, rock, jazz and swing.
- Hospitality and Logistics Support - a diverse hospitality and logistics role that includes bar and table service, canteen management, inventory management and a variety of general ship duties.
- Warehouse Storeperson - specialise in inventory and warehouse management, enjoying a rewarding role managing supplies, equipment, spares and provisions for the Navy, both ashore and at sea.
- Personnel Administration Specialist - employed within the Navy's personnel organisation as an administrator to run the office on a ship or base, handling pay, accounts and general clerical work.

Personal Requirements

- Australian citizenship
- At least 17 years of age
- Meet aptitude and medical requirements

Education and Training

To become a Navy sailor you have to complete Year 10 or equivalent with passes in English, mathematics and sometimes science. You will also need to successfully complete a series of aptitude tests, medical assessments and selection interviews.

Following selection and employment in the Navy as a sailor, you will need to undertake basic training. This involves an 11-week recruit course at the Navy Recruit Training School located at HMAS Cerberus on Western Port Bay in Victoria, followed by specialist training.

As different specialisations have different entry requirements, you should contact your nearest Defence Force Recruiting Centre for specific requirements.

Employment Opportunities

Recruitment into the Australian Defence Force is conducted on an Australia-wide basis all year round. Visit the Navy section on the Australian Defence Force website for more details about the application dates for individual specialisations.

Related Jobs

Deckhand (p 261); Integrated Rating (p 301); Police Officer - Australian Federal Police (p 160); Police Officer - State (p 161).

Park Ranger

$1,779 Very high skill Strong

Park rangers control, supervise and manage national parks, scenic areas, historic sites, nature reserves and other recreational areas.

Park rangers:

- assist with guided tours and promote an understanding and appreciation of the natural and cultural features of the park
- supervise public visits and inform visitors about park facilities, advising of park rules and regulations, and enforcing these when necessary
- direct parking, control traffic and collect fees from campers and visitors
- patrol waterways, roads and tracks to observe and report on the park environment, including the condition of animals and plants

- ensure parks, park facilities and equipment are clean and properly maintained
- assist with the development of visitor facilities
- assist with wildlife management projects, including surveys and monitoring of wildlife
- participate in search and rescue operations
- supervise and coordinate fire management, weed eradication and pest-control programs
- investigate and report to supervisors on matters relating to park management
- support local communities in protecting their cultural heritage and in developing sustainable land management practices
- conduct research into the protection and recording of Indigenous and historical sites
- supervise and train park staff and volunteers, and oversee crews of general maintenance workers and contractors
- undertake administrative and clerical duties
- prepare, review and implement reports, submissions, management plans, development proposals and environmental impact assessments.

Park rangers work in many environments, such as snow fields, rainforests, coastal regions and semi-arid areas. They may be required to work in remote areas and move from park to park. All rangers have contact with the public. Park rangers often work on weekends and public holidays.

Personal Requirements

- Able to make accurate observations and recordings
- Good communication skills
- Able to organise and supervise work
- Enjoy dealing with people
- Able to handle animals with confidence and patience
- Interested in land management and natural conservation
- Enjoy and have an interest in science
- Enjoy working outdoors in all weather conditions
- Able to endure isolation and limited social contact
- Mechanical aptitude

Education and Training

You can work as a park ranger without formal qualifications. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications and/or work experience. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a park ranger through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Alternatively, a university degree in a relevant discipline such as botany, environmental science, environmental management or geography may be useful. To get into these courses you usually need to a Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study.

Additional Information

Once employed, rangers often receive training in wildlife handling, fire management, weed eradication, pest control and enforcement.

Employment Opportunities

Park rangers are mainly employed by government agencies. Competition for positions is strong, and employers usually require applicants to have some park or nature-orientated experience. Some park rangers move between states and into forest officer, fisheries officer or land protection officer positions. Opportunities may also be available to work as conservation officers with local councils. With experience, and sometimes further training, park rangers may progress to professional science positions or general management.

Related Jobs

Agricultural Scientist (p 28); Botanist (p 234); Environmental Scientist (p 31); Fisheries Officer (p 33); Forester (p 34); Landcare Worker (p 36); Local Government Inspector (p 156); Natural Resource Manager (p 37).

Parliamentarian

Also known as Member of Parliament

Parliamentarians are elected by the people (constituents) of a particular region (such as an electorate) to represent their interests. They make decisions in federal, state or territory parliaments and undertake activities in their local electorates.

Parliamentarians:

- present issues for debate and discussion in parliament
- propose and debate new legislation and changes to existing legislation
- develop policy that best serves the interests of the public and the electorate
- investigate matters of concern to the public or particular interest groups
- present petitions on behalf of concerned interest groups
- serve on parliamentary committees or enquiries
- manage an office in their home electorate and in the house of parliament.

Parliamentarians have a high level of personal contact with the public. Elected parliamentarians tend to spend most of their time working with constituents who are seeking assistance with issues such as pensions, taxation, immigration, education, health services, visas and other matters of public concern.

Personal Requirements

- Good oral and written communication skills
- Enjoy talking to, working with and helping people
- Able to apply sound judgment
- Enjoy dealing with issues in current affairs and politics
- Prepared to work long hours
- Willing to travel and live away from home when required
- Sound management skills

Education and Training

There are no specific education requirements to become a parliamentarian, but it helps to have a broad educational background. Most parliamentarians have already established successful careers in other fields, such as law, business, agriculture, economics, industrial relations or community services, before standing for election. They may also have had previous experience as councillors, who perform many of the same tasks as parliamentarians at the local government council level. Parliamentary skills are usually developed on the job and through day-to-day contact with colleagues and party officials.

Entry to this occupation may be improved if you have a degree in political science, law, business, economics or an area in the humanities, such as English or history. To get into these courses

you usually need to gain your Senior Secondary Certificate of Education. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Parliamentarians can be elected to the Federal Senate or House of Representatives, or, at state and territory level, to the State Legislative Assembly or the Legislative Council. Local government councils also have elected councillors.

Employment Opportunities

Most parliamentarians in Australia are members of political parties. To be elected to parliament as a member of a political party you must first be pre-selected by the party to represent them in your electorate. You can also stand for election as an independent candidate.

Parliamentarians who gain extensive experience and develop a high profile in parliament and in the community can, if they are a member of a party in government, be promoted to ministerial positions. Ministers are responsible for managing a particular area of government such as defence or education. Experienced parliamentarians in opposition parties can become shadow ministers, who are responsible for developing their party's policies and leading debate in a particular area of government. Familiarity with specialist areas such as economics, finance, tourism and industrial relations may be advantageous to parliamentarians who are seeking particular portfolios.

Related Jobs

Economist (p 56); Lawyer (p 196); Public Servant - Australian Public Service (p 163); Public Servant - State Government (p 163); Trade Union Official (p 327).

Police Officer – Australian Federal Police

Also known as Federal Agent , Australian Federal Police Officer and Detective - Australian Federal Police

Police officers working for the Australian Federal Police (AFP) are responsible for policing federal law in all states and territories, and for community policing in the ACT and Australia's external territories. The AFP, with its headquarters located in Canberra, is Australia's international law enforcement and policing agency. It is the chief source of advice to the Australian Government on policing issues, enforces Commonwealth criminal law and protects Commonwealth and national interests.

Australian Federal Police Officers:

- investigate and prosecute offences committed against the Commonwealth in areas such as organised, corporate and computer crime; environmental offences; drug trafficking; fraud; counterfeiting and terrorism
- confiscate proceeds of crime when an offender is convicted
- carry out VIP and diplomatic protection duties as directed
- protect police witnesses and investigate the unlawful disclosure of government information and official corruption
- work in joint operations with state and territory police
- liaise with other police forces and crime prevention institutions to combat international crime
- contribute to United Nations activities such as peacekeeping and international aid programs
- undertake clerical and administrative duties.

Australian Federal Police officers work shifts. Their duties vary from team to team. They are required to serve anywhere in Australia, or in the Australian territories of Norfolk Island, Christmas Island, the Cocos (Keeling) Islands and Jervis Bay, and be willing to move with the job depending on operational requirements.

Personal Requirements

- Of sound character
- At least 18 years of age
- Hold a drivers licence
- Able to satisfy medical and fitness requirements
- Australian citizenship

Education and Training

To become a police officer (AFP) you usually have to gain your Senior Secondary Certificate of Education, or complete Year 10 plus a trade certificate. Tertiary qualifications may add to your competitiveness and, wherever possible, the AFP seeks to recruit graduates from a wide range of disciplines, not limited to law, justice or criminology studies.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Successful applicants complete 24 weeks of training at the AFP College in Barton, ACT. Recruits complete a further 12 months of on-the-job training.

Additional Information

To join the AFP, applicants must pass aptitude, medical and psychometric tests, as well as security checks, a fitness test and a selection assessment. Applicants must hold a Provide First Aid Certificate and be able to swim 100 metres unaided.

Employment Opportunities

Appointment to the AFP is based on merit, and recruits have the opportunity to seek employment in all states and territories of Australia. Overseas postings are also available. Recruits may be employed for duties as plain-clothed Federal Agents, or as uniformed officers in community policing in the ACT.

In addition to performing a variety of duties, recruits have the opportunity to gain experience in specialised policing roles (both uniformed and plain-clothed), as well as the chance to collaborate with national and international law enforcement agencies.

Entry is highly competitive. Job opportunities depend on the level of government funding and technological change in areas such as communication, computer technology, surveillance equipment, data collection and forensic services. The AFP is an equal opportunity employer and has an Indigenous recruitment and career development strategy.

Related Jobs

Air Force Officer (p 150); Army Officer (p 151); Army Soldier (p 152); Border Force Officer (p 153); Criminologist (p 186); Navy Officer (p 157); Navy Sailor (p 158); Police Officer - State (p 161); Private Investigator (p 197); Probation and Parole Officer (p 162); Public Servant - Australian Public Service (p 163); Security Officer (p 318).

Police Officer – State

Also known as Detective

Police officers protect the community from crime and disorder by providing services to uphold the law, protect life and property, preserve the peace, prevent crime, detect and apprehend offenders, and help those in need of assistance. After gaining experience, police officers may seek entry to specialist areas such as criminal investigation (detective work), radio communications, prosecutions, juvenile aid, accident investigation, water police, dog handling, traffic control, the mounted unit, education and training, and human resource management.

Police officers:

- promote crime prevention and undertake community policing activities to improve the quality of community life
- patrol assigned areas on foot or in vehicles to check security of property and watch for unusual activity
- apprehend law breakers
- investigate criminal offences and question suspicious people about their activities
- gather information about crimes and accidents by talking to victims and witnesses and taking notes and statements in writing
- direct and re-route traffic at congested areas
- respond to citizens' complaints and attend scenes of disturbances and reported illegal activities
- guard prisoners
- detain and search suspects for weapons, stolen goods or drugs
- work with ambulance, firefighting and defence force personnel to control emergency situations such as floods, bomb threats and chemical spills
- assist injured and distressed people and search for missing or lost people
- carry out routine clerical work
- issue infringement notices for traffic offences
- attend special events (such as football matches) and control crowds where necessary
- give evidence in court from previously prepared briefs and notes
- perform random breath tests of drivers to detect those driving under the influence of alcohol or drugs
- secure crime and accident scenes, and locate or obtain evidence for analysis
- give sympathetic, constructive and reassuring assistance and feedback to victims of crime.

All newly appointed police officers are initially required to perform station and patrol duties. Police officers are required to work shifts, including weekends and public holidays, and serve in any part of the relevant state or territory.

Personal Requirements

- Enjoy helping people
- Able to stay calm in difficult situations
- Able to cope with the physical demands of the job
- Tolerant of people from all backgrounds and cultures
- Honest and reliable
- Willing to accept responsibility
- Socially mature with a degree of mental toughness
- Able to analyse and solve problems
- Have an acceptable traffic/criminal record
- Australian or New Zealand citizenship or permanent residency
- Able to satisfy medical requirements

Education and Training

To become a police officer at state or territory level, you usually have to gain your Senior Secondary Certificate of Education, although requirements vary. Entry to this occupation may be improved if you have tertiary qualifications. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Applicants must successfully pass entry requirements, which may include literacy and reasoning examinations, character and fitness requirements, a medical test, psychological screening, computer skills testing and a selection panel interview. Successful applicants then undertake a further training program. To learn more about education and training in your state or territory, contact your local police recruiting branch.

Additional Information

Depending on your state or territory, you may need to have: a manual drivers licence, a Provide First Aid Certificate, a Bronze Medallion, Aquatic Rescue certificate or Police Rescue Award, the ability to swim a required distance unaided and computer competency and typing skills. Applicants must be at least 18 years of age.

Employment Opportunities

State and territory police departments encourage applications from Aboriginal and Torres Strait Islander people, women and people from non-English-speaking backgrounds.

Contact the police recruiting branch in your state or territory for further information.

Related Jobs

Air Force Officer (p 150); Army Officer (p 151); Army Soldier (p 152); Border Force Officer (p 153); Correctional Officer (p 154); Criminologist (p 186); Fisheries Officer (p 33); Indigenous Community Liaison Officer (p 155); Navy Officer (p 157); Navy Sailor (p 158); Police Officer - Australian Federal Police (p 160); Probation and Parole Officer (p 162); Security Officer (p 318).

Postal Employee

Postal employees of Australia Post sort and deliver mail and parcels and undertake clerical and retail sales functions. The major work classifications for Australia Post employees are grouped into the broad categories of sorting and dispatching, delivery and customer service.

Postal employees:

- sort mail for delivery rounds
- deliver mail on foot, by bicycle or by motorised transport over allocated delivery rounds
- load and unload mail conveyances and operate internal mail handling equipment
- assist with the receipt of inward mail; checking of wrongly addressed, missorted, undelivered and redirected mail; and processing of free post and under-paid mail
- deliver express courier items and parcels
- assist with sales and customer service enquiries
- assist with the processing of outward mail.

Personal Requirements

- Good communication skills
- Self-motivated and reliable
- Able to lift up to 16 kg
- Able to work as part of a team

Education and Training

You can work as a postal employee without formal qualifications, but employers usually require Year 10. Applicants may be required to sit a selection test that focuses on literacy and numeracy.

Successful applicants participate in a training course provided by Australia Post at selected metropolitan post offices/retail shops or other facilities, depending on their job specialisation.

Applicants for positions that require driving or riding a motorcycle may be given a practical driving and traffic code test.

Additional Information

Postal delivery officers, postal transport officers and some postal sorting officers who drive motor vehicles must have the appropriate class of drivers licence. To be a motorcycle postal delivery officer, you must hold an unrestricted motorcycle licence and weigh less than 100 kg.

Employment Opportunities

Australia Post operates as a self-funding government business enterprise and is the main employer of postal employees in both city and rural areas. Some postal duties (such as mail services in country areas) may be contracted out to non-government organisations.

For information about application procedures or to view current vacancies, visit the Australia Post website.

Related Jobs

Bank Officer (p 53); Delivery Driver (p 288); Public Servant - Australian Public Service (p 163).

Probation and Parole Officer

Probation and parole officers supervise offenders who have been placed on community-based orders by the courts, as well as offenders released on parole from prison.

Probation and parole officers:

- manage and supervise offenders who have received community-based supervision orders (community service, home detention, probation or parole, for example) and ensure that they comply with the relevant order conditions
- monitor home detainees by means of home visits and electronic monitoring technology, and report all breaches of conditions
- develop and implement community-based work programs
- assess suitability, placement and management of offenders granted community service orders and fine option orders
- interview offenders, their families, employers and educators to obtain information
- submit reports and recommendations on whether parole should be granted
- provide advice to assist the courts in determining the suitability of offenders to be placed on community-based orders
- assist offenders to obtain employment
- identify the risks and needs of offenders and refer them to appropriate programs and/or external agencies
- advise parolees and those on community-based orders on matters such as education, employment, finance, housing and other community services that may assist in their rehabilitation
- conduct regular interviews with offenders and report on their progress
- maintain contact with families to help solve problems of readjustment and rehabilitation
- assist in preparing briefs for prosecuting offenders who fail to comply with community-based orders or breach parole conditions
- maintain and develop offender records and administrative procedures
- take part in staff development and training programs, and provide training to new staff
- participate on various committees to assist in policy, practice and community development.

Probation and parole officers may work in an office or in non-institutionalised community corrections centres. A proportion of their time is spent in court and visiting prisons to interview and assess offenders and prisoners.

Personal Requirements

- Able to work in a team environment
- Mature, patient, tolerant and discrete
- Able to assess people and situations
- Interest in people and their welfare
- Assertiveness
- Good communication and interpersonal skills
- Australian citizenship or permanent residency

Education and Training

You can work as a probation and parole officer without formal qualifications. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications and you may like to consider a VET course. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a probation and parole officer by studying behavioural science, social work, social science, criminology, justice studies or psychology at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

You must obtain a National Police Check to become a probation and parole officer. You may also need to pass an integrity check and hold a valid drivers licence.

Employment Opportunities

For further information, contact the corrective services department in your state or territory.

Related Jobs

Community Worker (p 249); Correctional Officer (p 154); Counsellor (p 170); Police Officer - Australian Federal Police (p 160); Police Officer - State (p 161); Social Worker (p 250); Welfare Worker (p 250).

Public Servant – Australian Public Service

Also known as Australian Public Servant

Public servants in the Australian Public Service (APS) work in a wide range of areas such as community and social services, defence, economic management, education, employment, foreign affairs, health, housing, industrial relations and transport. They are employed in a variety of clerical, technical and professional careers.

There are various entry points to the APS:

- Trainee Administrative Service Officer who advances to Administrative Service Officer Level 1/APS Level 1 after completing the Government Traineeship.
- Graduate Administrative Assistant who advances to Research Officer Grade 1 or Administrative Service Officer Level 3/APS Level 3 after completing their training program.
- Administrative Service Officer/Executive Level Officer who enters with specific skills in response to advertisements for vacant positions, and may progress to Executive Level 1 or 2, in which they may undertake management roles.

A public servant in the APS may specialise in the following categories:

- Administrative Service Officer who may perform a range of administrative, research and policy tasks, depending on the government department or agency they work for.
- Foreign Affairs and Trade Officer who works on the policy and operational aspects of Australia's foreign policy and trade interests. Officers work for the Federal Department of Foreign Affairs and Trade and can be located in capital cities around Australia or overseas.
- Information Technology Officer who provides support, and develops and manages networked computing systems. They also install, customise and support various software systems and other information technology products and services.
- Professional and Technical Officer who may be employed in a number of areas within the APS, depending on their qualifications and specialisations. They may work as Archivists, Conservators, Librarians, Meteorologists, Microbiologists, Psychologists, Public Relations Officers, or in other professional and technical areas. Refer to these entries for education and training information.

Personal Requirements

- Able to communicate effectively in spoken and written English
- Able to deal confidently with people at all levels
- Discreet when handling confidential information
- Prepared to learn and use information technology
- Australian citizen or permanent residency with intention of citizenship

Education and Training

The education and training requirements to become a public servant in the APS differ depending on the position. There are no standard qualifications to become a Trainee Administrative Service Officer, although departments and agencies generally require Year 10. Different departments or agencies may have their own specific requirements and should be contacted directly for further information.

Graduate entry into the APS requires completion of a degree from a recognised tertiary institution. Entry to these courses usually requires you to gain your Senior Secondary Certificate of Education.

Additional Information

In order to work within the Australian Public Service you will need to meet the set selection criteria of the particular job category. You will also be required to undergo a National Police Check and pass a health and fitness test.

The actual tasks and duties carried out by the various job levels differ between departments and agencies. For specific task descriptions and training requirements you will need to speak to the recruitment officers of the different departments.

Employment Opportunities

Australian public servants work in every state and territory in Australia. Many positions are in the capital cities or larger cities and towns. There are limited opportunities for overseas postings. Many graduate-entry positions are based in Canberra.

For Indigenous Australians, opportunities for employment while studying are available under the Indigenous Cadetship Support initiative. This employment program aims to assist Indigenous jobseekers to gain professional positions in both the private and public sectors. Visit the Department of Employment website (http://employment.gov.au) for more information.

Related Jobs

Administrative Assistant (p 51); Border Force Officer (p 153); Customs Broker (p 55); Human Resources Officer (p 59); Intelligence Analyst (p 156); Occupational Health and Safety Officer (p 178); Parliamentarian (p 159); Police Officer - Australian Federal Police (p 160); Postal Employee (p 161); Public Relations Officer (p 75); Research Officer (p 244); Translator (p 191); Welfare Worker (p 250).

Public Servant – State Government

Also known as State Public Servant

State government public servants are government employees who work in any of the departments of a state or territory government.

The State Public Service offers a broad range of administrative, clerical, technical and professional careers in areas such as public policy, planning, welfare, education, natural resources management, water supply, construction, legal services, law and order, health, and tourism and recreation.:

The main fields of employment are administrative and clerical, and professional and paraprofessional. These occupations exist across all departments and agencies, and include positions from entry level to senior management.

Personal Requirements

- Good oral and written communication skills
- Discreet when dealing with confidential information
- Able to analyse and solve problems
- Good organisational and time management skills
- Responsible attitude
- Able to work neatly and accurately
- Able to work as part of a team
- Methodical approach to work
- Australian citizenship, permanent residency or an appropriate work visa

Education and Training

To become a state public servant you usually have to complete Year 10 or your Senior Secondary Certificate of Education,

depending on the entry position. Your employment prospects may be improved if you have qualifications or basic skills in computing, data entry and administration. Training is also given on the job.

The principle of merit in recruitment and promotion means that the person whose skills, knowledge and experience best match the job requirements will be selected. In addition, each position in state government has specific requirements, and job applicants need to demonstrate that they meet these requirements by responding to set selection criteria.

Graduate entry into state government requires completion of a degree from a recognised tertiary institution. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Competition for graduate positions remains strong. Promotions and transfers within the public sector may be available, although advancement depends on an officer's ambitions, qualifications, skills and abilities. Middle-level positions require ability or experience in more complex processing, investigation or supervision. More senior positions involve policy formulation, leadership and management skills.

Related Jobs

Court Officer (p 195); Local Government Inspector (p 156); Parliamentarian (p 159); Public Servant - Australian Public Service (p 163); Receptionist (p 267); Research Officer (p 244).

Health services & support

The health services and support field encompasses a wide range of professions in fields relating to health and welfare. Some health workers focus on health administration, others on education, and some work for public health organisations. Before applying for a course, it's a good idea to speak with someone in that profession so that you can get a better feel for it.

Courses and specialisations

Some of the majors you can study in this field include ambulance services, community health, disability studies, environmental health, health promotion, natural medicine, nutrition and dietetics, oral health and radiography.

Degrees in this field will not always be called 'health' or 'health science'; many will be named after their specialisations (such as a Bachelor of Oral Health or Bachelor of Paramedicine). Many of these courses will be narrowly focused on preparing you for particular occupations. Make sure that it's definitely what you want to do, or that you can change focus down the track if you need to.

Where to study

Many health professionals such as medical imaging technologists need professional registration to gain accreditation to practise, so it's important to check that your course meets the requirements of your chosen occupation before applying. When it comes to choosing a particular institution or course, consider the amount of practical training offered, the clinical facilities and whether it utilises any of the popular online technologies that simulate practical aspects of the job.

Five-star universities

Educational experience

JCU	87.5%
ECU	86.9%
SUNSHINE COAST	85.5%
BOND	84.6%
GRIFFITH	83.1%
UniSA	82.9%
ACU	82.8%

National average
76.3%

Graduate employment

JCU	84.3%
SOUTHERN CROSS	83.6%
FLINDERS	83.3%
CQUni	82.9%
NEWCASTLE	82.5%
SYDNEY	82.1%
FEDERATION	81.5%

National average
72.6%

Learner engagement

BOND	75.8%
JCU	69.4%
MONASH	66.3%
SUNSHINE COAST	66.3%
FLINDERS	65.7%
ACU	64.8%
QUT	63.4%
ANU	62.5%
ADELAIDE	62.5%

National average
49.7%

Learning resources

JCU	95.5%
BOND	93.9%
GRIFFITH	92.6%
ECU	92.0%
SUNSHINE COAST	91.4%
FEDERATION	89.7%
MURDOCH	89.2%
QUEENSLAND	89.1%

National average
82.6%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

9,063
Undergraduate

29,636
Postgraduate

3,984
International undergraduate

What can I do?

- Family support
- International aid
- Youth services
- Food and nutrition policy
- Disability care
- Health counselling

Graduate starting salary

$45,800
Undergraduate

$66,100
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

72.6%
Undergraduate

85.2%
Postgraduate

Five-star universities

Median starting salary

UNSW	$83,600
TASMANIA	$82,000
CQUni	$79,100
CSU	$65,500
MONASH	$59,100
FLINDERS	$56,800
QUT	$55,800

National average
$45,800

Skills development

JCU	94.4%
ECU	89.0%
UniSQ	88.5%
BOND	88.1%
SUNSHINE COAST	87.9%
ACU	87.4%
MONASH	85.8%

National average
81%

Student support

BOND	90.2%
JCU	85.9%
UniSQ	82.1%
SUNSHINE COAST	82.0%
ECU	81.6%
GRIFFITH	81.5%
UniSA	80.0%
FLINDERS	79.8%
ADELAIDE	79.7%

National average
74.6%

Teaching quality

BOND	91.0%
SUNSHINE COAST	91.0%
JCU	90.3%
NOTRE DAME	89.9%
UniSQ	89.0%
ECU	88.6%
FEDERATION	87.4%
ACU	86.5%

National average
81.7%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Aboriginal/Torres Strait Islander Health Worker

Also known as Aboriginal Health Worker and Aboriginal/Torres Strait Islander Health Practitioner

Aboriginal/Torres Strait Islander health workers provide clinical and primary health care for individuals, families and community groups. They deal with patients, clients and visitors to hospitals and health clinics, and assist with arranging, coordinating and providing health care in Aboriginal and Torres Strait Islander community health clinics.

Aboriginal/Torres Strait Islander health workers may choose to specialise in particular health areas such as optical, hearing, women's health or infant care.

Aboriginal/Torres Strait Islander health workers:

- treat diseases or injuries
- maintain health records and statistics
- act as a communicator and/or interpreter on behalf of clients and other health workers
- take part in case management and follow-up, independently or with other healthcare providers
- provide health education to individual clients and health staff
- provide cultural education to people outside the Aboriginal and Torres Strait Islander community
- provide life skills education to the community they serve
- provide counselling and referrals for problem cases
- contribute to the planning, development, implementation, monitoring and evaluation of all health programs in the community
- carry out administrative duties, including budgeting and correspondence.

Aboriginal/Torres Strait Islander health workers often work in remote communities, but are also found in metropolitan areas. There is often shift work and long distances to visit remote communities.

Specialisations

- Aboriginal/Torres Strait Islander Hospital Liaison

Personal Requirements

- Strong communication and negotiation skills
- Strong organisational skills
- Cultural awareness and sensitivity
- Able to work independently and as part of a team

Education and Training

To become an Aboriginal/Torres Strait Islander health worker you usually have to complete a VET qualification in Aboriginal and/or Torres Strait Islander primary health care or Aboriginal and/or Torres Strait Islander primary health care practice. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become an Aboriginal/Torres Strait Islander health worker through a traineeship in Aboriginal and/or Torres Strait Islander Primary Health Care or Aboriginal and/or Torres Strait Islander Primary Health Care Practice. Entry requirements vary, but employers generally require Year 10.

Additional Information

Applicants must be of Aboriginal or Torres Strait Islander descent.

In order to use the title Aboriginal and Torres Strait Islander health practitioner, Aboriginal health practitioner or Torres Strait Islander health practitioner, you need to register with the Aboriginal and Torres Strait Islander Health Practice Board of Australia. Aboriginal/Torres Strait Islander health workers who are not required by their employer to use one of these titles do not need to register with the board. Visit their website for more details.

Employment Opportunities

Aboriginal/Torres Strait Islander health workers are employed in hospitals, health clinics and other health services in metropolitan and rural areas. They work in teams with doctors, nurses and other healthcare professionals.

With experience, and sometimes further training, Aboriginal/Torres Strait Islander health workers may take on management responsibilities.

Related Jobs

Community Worker (p 249); Therapy Aide (p 180); Welfare Worker (p 250); Youth Worker (p 251).

Aged Care Worker

Also known as Nursing Assistant (Aged Care) , Personal Care Worker (Aged Care) , Residential Care Worker , Care Service Worker , Home Care Worker and Personal Care Worker

Aged care workers provide care, supervision and support for aged people in residential establishments, clinics, hospitals and private residence. They assist with the maintenance of personal care, domestic duties and management of illness. They also provide companionship and emotional support, and promote independence and community participation.

Aged care workers:

- assist people with self-medication
- implement care programs for those in residential establishments
- provide in-home support with health issues and daily living tasks such as washing, dressing, eating, transport and budgeting
- assist with the delivery of activities to enhance the physical, social, emotional and intellectual development of those in their care
- ensure those in their care are washed, dressed, fed and ready for educational and recreational activities
- assist during domestic activities such as eating meals and showering
- provide companionship and support during daily activities
- cook and serve meals, clean premises, wash, iron and perform other household tasks
- organise refuge accommodation
- implement appropriate strategies for managing problems related to dementia
- work with a team of health professionals, family, friends and carers to implement a support program.

Aged care workers work in private homes and community establishments and may be required to work evenings, weekends and public holidays, or live on the premises.

Personal Requirements

- Patient, flexible and understanding
- Supportive and caring nature
- Commitment to the rights of the elderly to live dignified lives

- Able to accept responsibility
- Good communication skills
- Able to work as part of a team
- Able to cope with the physical demands of the job
- Able to perform domestic duties efficiently

Education and Training

To become an aged care worker you usually have to complete a VET qualification in ageing support or individual support. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become an aged care worker through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

To work as an aged care worker, you must obtain a National Police Certificate and a Provide First Aid Certificate. An additional employment screening is conducted in South Australia.

A drivers licence is essential for those providing community and home support care.

Employment Opportunities

Aged care workers may work in a variety of settings, including residential aged-care facilities, day therapy centres and special dementia care units. They may also visit clients in their homes.

Related Jobs

Community Worker (p 249); Disability Support Worker (p 172); Occupational Therapist (p 225); Social Worker (p 250); Teacher - Special Education (p 130); Therapy Aide (p 180).

Anaesthetic Technician

Also known as Anaesthesia Paramedical Officer

Anaesthetic technicians prepare and maintain anaesthetic equipment for operating theatres and clinics, and assist anaesthetists during anaesthetic procedures.

Anaesthetic technicians:

- set up, check and maintain anaesthetic workstations, life support machines and associated equipment
- order and prepare medical supplies for anaesthesia
- discuss medical procedures with patients and check whether they have any medical conditions that could cause problems under anaesthesia
- assist the anaesthetist to insert breathing tubes and intravascular lines in patients
- assist the anaesthetist to administer anaesthesia to patients
- monitor patients and their vital signs before, during and after procedures
- maintain documentation before, during and after surgery
- assist with basic life support and post-operative care
- assist the anaesthetist in emergencies.

Personal Requirements

- Good communication and people skills
- Attention to detail
- Able to work under pressure
- Good technical and measurement skills
- Aptitude for working with computers
- Organised and methodical
- Able to cope with the physical demands of the job

Education and Training

To become a qualified anaesthetic technician you usually have to complete a VET qualification in anaesthetic technology. To get into these courses you usually have to be employed in the anaesthetic area of a hospital or medical clinic, working under an appropriately qualified supervisor. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Additional Information

Before undertaking the clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.Voluntary registration and membership of the Australasian Society of Anaesthesia Paramedical Officers (ASAPO) may be available upon graduation. Student membership is also available. Registration with ASAPO is not compulsory, but it is strongly recommended as many employers require anaesthetic technicians to be registered as a condition of employment. see the ASAPO website for further information.

Employment Opportunities

Anaesthetic technicians are employed primarily in large public and private hospitals. Opportunities also exist in smaller hospitals, medical clinics and remote area medical assistance.

Related Jobs

Medical Laboratory Technician (p 177); Midwife (p 177); Nurse - Enrolled (p 212); Paramedic (p 205).

Audiologist

Audiologists test hearing and assess the nature of hearing disorders. They are responsible for the non-medical management and rehabilitation of hearing loss and associated disorders of communication.

Audiologists:

- establish a client's problems with hearing and listening by conducting interviews and studying background information
- assess the extent of hearing loss and location of the problem using a wide range of techniques, including audiometric tests such as air and bone conduction tests
- report results of assessment and testing in writing and make referrals to medical practitioners
- provide rehabilitation programs, such as counselling and guidance, for the hearing-impaired and their families
- assess hearing levels of workers, such as pilots or members of the armed forces
- prescribe, fit and evaluate hearing aids and other devices, such as cochlear implants
- provide training in communication strategies such as lip reading and in the use of auditory and other devices
- conduct follow-up consultations after hearing aids have been fitted to ensure clients receive the clearest amplification
- assist with the development and management of noise control and hearing conservation strategies in industry.

Audiologists liaise with other health professionals such as otologists (ear specialists), speech pathologists, psychologists and

doctors, as well as staff in educational settings. They may travel to country areas where there are no resident audiologists.

Personal Requirements

- Able to inspire confidence and cooperation
- A sympathetic and tactful approach to people's problems
- Good communication skills
- Analytical ability

Education and Training

To become an audiologist you usually have to study biomedicine, biological science, health science or a related field at university, followed by a postgraduate qualification in audiology. To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.

Graduates are eligible for full membership of Audiology Australia. A Certificate of Clinical Practice is recognised by the society as the benchmark for undertaking the clinical practice of audiology in Australia. Clinical certificates require at least 12 months of supervised clinical practice. Contact Audiology Australia for details.

Employment Opportunities

Audiologists are employed by private enterprise, major hospitals, community health centres or in academic research or teaching positions. They often work in association with medical practitioners specialising in ear, nose and throat disorders. Employment opportunities are also available in private practice, as well as in special education or industrial audiology.

Demand depends on factors such as population growth, the ageing of the population, public sector funding and policies affecting the cost of services to consumers. There are opportunities for part-time work.

Audiometrist

Audiometrists test hearing by administering audiometric tests to enable the rehabilitation of hearing loss through counselling and/or the fitting of hearing devices. They may refer or report to a medical practitioner or an audiologist as required.

Audiometrists:

- administer tests to assess and measure hearing
- explain to patients how the audiometric equipment will be used to measure their hearing
- fit earphones or bone conductors on patients and adjust controls on an audiometer to administer the tests
- send a report to the audiologist or medical practitioner where required once the results of a test are recorded
- take ear impressions to make ear moulds, so that a suitable hearing aid may be chosen
- fit and check hearing aids and give instructions on their use
- provide follow-up care and advice.

Specialisations

- Clinical Audiometrist
- Hearing Aid Audiometrist
- Industrial Screening Audiometrist

Personal Requirements

- Good communication skills
- Able to work accurately with precision instruments
- Able to be patient with hearing-impaired and elderly people

Education and Training

To become an audiometrist you usually have to complete a VET qualification in audiometry. Entry usually requires Year 12. Students must also have a suitably qualified supervisor to oversee practical tasks and guide them through required competencies. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become an audiometrist through a traineeship in Audiometry. Entry requirements may vary, but employers generally require Year 12.

Additional Information

Audiometrists are not able to work with patients suffering complex hearing loss. Such cases require more advanced knowledge of audiology and its associated skills. see the separate entry for Audiologist for more details.

Employment Opportunities

Audiometrists are mainly employed by hearing aid firms but may also work in hospitals, laboratories and some audiology practices. There are also opportunities to work in public facilities.

Demand for audiometrists is expected to grow with the ageing of the population.

Related Jobs

Audiologist (p 168); Medical Laboratory Technician (p 177); Operating Theatre Technician (p 179); Speech Pathologist (p 229).

Cardiac Technologist

Cardiac technologists provide technical services for the investigation, diagnosis and treatment of heart disease. As part of the cardiology team, cardiac technologists operate a range of specialist equipment, which provides data that cardiologists and other medical practitioners use for patient care.

Cardiac technologists:

- record the electrical activity of the heart, from which the heart rate is measured and its pattern and rhythm are interpreted
- assess patients' cardiac response to exercise using a treadmill or stationary bicycle and electrocardiography (ECG) recording
- test implanted cardiac pacemakers with computerised equipment
- monitor and record ECG and blood pressure data during interventional procedures
- record ECG data from within the heart in order to diagnose and treat abnormal heart rhythms
- operate ultrasound equipment to scan the heart from the chest wall, obtaining and measuring images of the heart to assess blood flow and valve abnormalities
- study the effects of cardiovascular drugs and diseases using many of the above techniques.

Personal Requirements

- Careful and analytical approach to work
- Sympathetic, supportive and professional approach to patients
- Ability to follow safety guidelines
- Good communication skills
- Commitment to ongoing professional development
- Able to work as part of a team

Education and Training

To become a cardiac technologist you usually have to complete a degree at university with a major in biophysics, health science, nursing, physiology or exercise physiology. Once you are employed, you will receive some on-the-job training and may be required to undertake further study in cardiac technology. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Cardiac technologists performing echocardiograms need to be accredited with the Australian Sonographer Accreditation Registry (ASAR). Student membership is also available for students participating in an ASAR-accredited medical ultrasound program of study. see www.asar.com.au for more information on accreditation requirements.

Employment Opportunities

Most large metropolitan and regional public and private hospitals have cardiac investigation units, and there is growth in the private sector, particularly for cardiac ultrasound. Training opportunities and position grading vary between states and between institutions.

Related Jobs

Anaesthetic Technician (p 168); Audiometrist (p 169); Medical Scientist (p 203).

Counsellor

$1,584 | Very high skill | Very strong

Counsellors assist people to identify and define their emotional issues and better understand themselves by explaining options, setting goals, providing therapy and helping them to take action. Counsellors may specialise in working with a particular group, such as people from non-English-speaking backgrounds, Aboriginal and Torres Strait Islander people or single parents. Alternatively, they may specialise in a service area such as health, drug and alcohol problems, accommodation, relationships, employment, grief and loss, stress management, child development or abuse issues.

Counsellors:

- work with clients to find solutions to emotional, mental and lifestyle problems
- act as facilitators in group sessions
- work with other professionals such as medical practitioners, psychologists and social workers as part of a health management team
- act as intermediaries in conflict-resolution.

Specialisations

- Drug and Alcohol Counsellor
- Genetic Counsellor
- Mediator
- Family Counsellor
- Marriage Counsellor

Personal Requirements

- Empathetic and caring
- Good communication and listening skills
- Maturity

Education and Training

You can work as a counsellor without formal qualifications. Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification in counselling. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a counsellor by completing a degree in counselling, psychology or a related field. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Students and graduates may be eligible for membership of the Australian Counselling Association. Visit their website for more information.

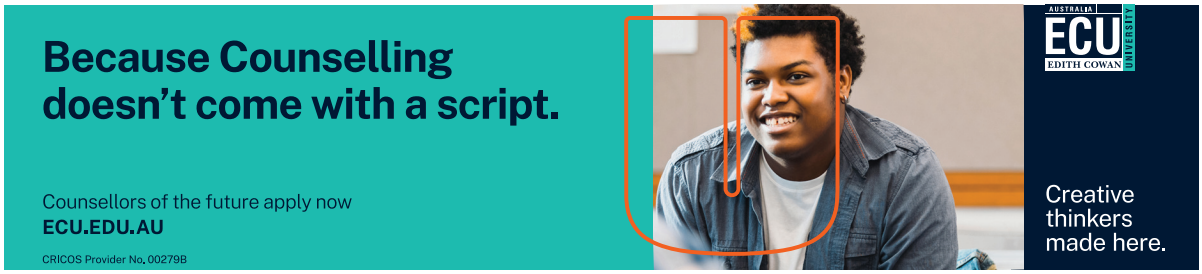
Employment Opportunities

Many counsellors are self-employed in their own counselling practices.

Counsellors may also be employed by community service organisations, hospitals, schools, clinics and government departments. Large corporations and organisations often employ counsellors who specialise in workplace or organisational counselling. Competition is strong for available work.

Related Jobs

Career Development Practitioner (p 122); Community Worker (p 249); Midwife (p 177); Nurse - Registered (p 212); Psychologist (p 220); Social Worker (p 250); Youth Worker (p 251).



Dietary Aide

Dietary aides assist dietitians to maintain high standards of nutritional care for patients in hospital settings.

Dietary aides:

- discuss the dietary needs of patients with healthcare professionals
- interview patients to discuss food preferences
- assist with the planning of menus for patients
- ensure food is hygienically and correctly prepared and well presented
- maintain diet records
- assist with the implementation of a nutrition care plan in consultation with dietitians
- assist with training staff to prepare and serve meals for patients with particular diets
- use computers for data entry and retrieval.

Dietary aides may be required to undertake rostered weekend work and shiftwork.

Personal Requirements

- Good communication skills
- Enjoy working with people
- Good organisational skills

Education and Training

You can work as a dietary aide without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information. You can also become a dietary aide through an apprenticeship or traineeship in Catering Operations or Allied Health Assistance. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Students must be 18 years of age or older if undertaking modules that involve the service of alcohol.

Employment Opportunities

Dietary aides are employed in public and private hospitals, as well as in larger nursing homes. Demand depends on the general level of funding within the health system.

Related Jobs

Dietitian (p 171); Kitchen Hand (p 266); Nutritionist (p 178).

Dietitian

Dietitians apply the art and science of human nutrition to help people understand the relationship between food and health, make healthy dietary choices, and prevent and treat illness and disease.

Dietitians:

- collect, organise and assess data relating to the health and nutritional status of individuals, groups and communities
- interpret and communicate scientific information, advice, education and professional opinion to individuals, groups and communities
- manage nutrition care for individuals by planning appropriate diets and menus
- educate people about their individual nutritional needs and methods of accessing and preparing their food
- manage food service systems to provide safe and nutritious food by designing nutritionally appropriate menus and implementing nutrition policies
- plan, evaluate and implement nutrition programs with individuals, groups or communities as part of a team (this may be in a community health, public health or food industry setting)
- conduct food-related and nutrition-related research and evaluate practice.

Dietitians generally have a high level of contact with the public.

Personal Requirements

- Interest in food, nutrition and health
- Good communication skills
- Good analytical skills
- Good organisational skills
- Able to take initiative
- Able to work effectively with people
- Aptitude for science

Education and Training

To become a dietitian you usually have to study a degree in dietetics accredited by the Dietitians Association of Australia. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and biology are normally required. Universities have different prerequisites and some have flexible entry requirements.

Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students may need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information. Some qualified dietitians may choose to refer to themselves as nutritionists, although not all 'nutritionists' are dietitians. Only a practitioner who has completed a university course accredited by the Dietitians Association of Australia (DAA) is eligible to apply for the Accredited Practising Dietitian (APD) credential. Check the association's website for a list of accredited courses (http://daa.asn.au/universities-recognition). APD status is often a prerequisite for employment in this field. Graduates of DAA-accredited courses are eligible for membership of the association. see the separate entry for Nutritionist for details about relevant pathways.

Employment Opportunities

Graduates find employment in a wide variety of roles and settings, such as patient care and education in hospitals, nutrition and health education in community health centres, public health nutrition and food and nutrition policy in government departments, private practice and consultancy, education and training, food industries, health promotion and nutrition research. Opportunities are also available in sports nutrition, publishing and the media. Some dietitians work on a part-time basis. Opportunities for dietitians are affected by a range of factors, including government funding and the recognition of nutrition by the community as a means of preventing and treating diet-related diseases, such as heart disease, cancer and diabetes. Demand for dietitians depends on the level of public and professional awareness, as well as private health rebate schemes.

Related Jobs

Caterer (p 258); Exercise Scientist (p 173); Food Technician (p 236); Nutritionist (p 178).

Disability Support Worker

Also known as Aged Carer , Developmental Care Worker , Disabled Carer , Home Support Worker , Intellectual Disability Services Officer , Nursing Assistant (Disability Support) and Special Care Worker

Disability support workers provide care, supervision and support for people with disabilities in the home, residential establishments, clinics and hospitals. They also work with other health professionals to maximise the individual's physical and mental wellbeing. They also provide companionship and emotional support, and when possible, promote independence and community participation.

Disability support workers:

- implement care programs for those in residential establishments
- provide in-home support with health issues and daily living tasks such as washing, dressing, eating, transport and budgeting
- assist with the delivery of activities to enhance the physical, social, emotional and intellectual development of those in their care
- interview clients and assess and review the extent of difficulties
- ensure clients are washed, dressed, fed and ready for educational and recreational activities
- assist clients during domestic activities such as eating meals and showering
- provide companionship and support during daily activities
- cook and serve meals, clean premises, wash, iron and perform other household tasks
- assist people with self-medication
- work with a team of health professionals, family, friends and carers to implement a program of support.

Disability support workers work in private homes and community establishments. They may be required to work evenings, weekends and public holidays and may be required to live on the premises. Some positions may be casual.

Specialisations

- Attendant Care Worker
- Home Care Worker

Personal Requirements

- Patient, flexible and understanding
- Supportive and caring nature
- Commitment to the rights of people with disabilities to live dignified lives
- Able to accept responsibility
- Good communication skills
- Able to work as part of a team
- Able to cope with the physical demands of the job
- Able to perform domestic duties efficiently

Education and Training

You can work as a disability support worker without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have qualifications or experience working with people who require care. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a disability support worker through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

To work with children, you must obtain a Working with Children Check, National Police Certificate and Provide First Aid Certificate. A drivers licence and form of transport is essential for those providing community and home support care.

Employment Opportunities

Disability support workers are employed by community health centres, local government authorities, private hospitals, private residences and multidisciplinary health centres in rural areas.

Related Jobs

Counsellor (p 170); Occupational Therapist (p 225); Social Worker (p 250); Teacher - Special Education (p 130); Therapy Aide (p 180); Welfare Worker (p 250).

Diversional Therapist

Diversional therapists provide recreational and leisure services for individuals in healthcare centres and in the community to encourage them to take part in activities, assist in their social development and promote a sense of wellbeing.

Diversional therapists:

- help clients to identify their preferred recreational activities
- encourage and support clients to take part in activities suited to their particular needs and interests
- provide information on resources available within the local community and from associated agencies
- perform administrative duties
- arrange for the purchase of leisure and recreational supplies and equipment
- organise leisure and recreational events
- train and supervise volunteers
- encourage interaction between clients and the community.

Diversional therapists work with a wide range of clients whose needs arise from ageing, physical or intellectual disabilities, mental illness or undergoing medical treatment. They work alongside other health and community workers to help clients reach their full potential.

Personal Requirements

- Enjoy helping and interacting with people
- Interested in leisure and recreation as a way of promoting wellbeing
- Sensitive to the needs of a wide range of individuals
- Able to work as part of a team
- Able to coordinate and lead group activities

Education and Training

To become a diversional therapist you usually have to complete a degree in health science at university with a major in leisure and health or therapeutic recreation. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. A number of universities in Australia offer

degrees in these areas. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information. Graduates of the degree courses may be eligible for membership of Diversional Therapy Australia.

Employment Opportunities

Diversional therapists work with individuals and groups in a range of settings, including aged-care facilities, respite care, community health centres and retirement villages. Diversional therapy programs are also offered in the geriatric, psychiatric and rehabilitation departments of public and private hospitals, as well as in correctional institutions, often in association with occupational therapy services. Diversional therapists may also work in agencies and institutions that provide special services for clients with visual, hearing and speech disabilities. These include Vision Australia, MS Australia and the Australian Red Cross. They may also work in private practices or consultancies. Job opportunities depend on the number of people living in agedcare facilities and residential care institutions, the number of aged citizens and funding for institutions and programs.

Related Jobs

Music Therapist (p 108); Occupational Therapist (p 225); Recreation Officer (p 124).

Exercise Scientist

$2,094 Very high skill Very strong

Also known as Biomechanist

Exercise scientists assist sportspeople to achieve the best possible sporting performance by applying knowledge and techniques from the areas of biomedical science, physiology, biomechanics (the study of human movement), nutrition, psychology and sport assessment.

Exercise scientists:

- conduct assessments specific to an athlete's sport to determine how to improve sporting performance
- devise treatment and exercise programs that support athletes' preparation and recovery, and help them return to training or competition
- conduct research, make observations and interpret data in relation to sporting performances, and communicate findings to officials, athletes, coaches and other support staff
- design or assist in developing training programs for sportspeople to improve sporting performance and reduce the risk of injury
- refer clients to sports medicine physicians and other health professionals such as physiotherapists, dietitians, sports psychologists and podiatrists
- work as part of the athlete's support team to develop the athlete's performance.

Exercise scientists often attend training sessions and sporting events to monitor sporting performances in addition to working in an office or testing laboratory. They have a high level of contact with the public.

Specialisations

- Exercise Physiologist
- Motor Control and Learning Specialist
- Sports Biomechanist
- Sports Scientist

Personal Requirements

- Interested in sport and fitness
- Interested in physical and biomedical sciences
- Good observation and problem-solving skills
- Able to work with accuracy and attention to detail

Education and Training

To become an exercise scientist you usually have to complete a degree in sport and exercise science or human movement. Alternatively, you may choose to complete a degree in a relevant area, such as nutrition, physiotherapy or medicine, followed by a postgraduate qualification in exercise science or clinical exercise physiology.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry or physics are normally required. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.

Graduates from an approved degree course may apply for membership with Exercise and Sports Science Australia (ESSA). Student memberships may also be available.

Employment Opportunities

Exercise scientists work at sports institutes (such as the Australian Institute of Sport), professional sports clubs, sports medicine clinics and sporting associations. A number of professionals working in sports medicine are self-employed and may subcontract their services. Clients include professional and amateur sportspeople.

Exercise scientists may work as consultants in fitness performance analysis and injury rehabilitation. Some exercise scientists volunteer at sporting clubs.

Related Jobs

Medical Practitioner (p 202); Medical Scientist (p 203); Nutritionist (p 178); Physiotherapist (p 227); Sports Coach (p 270); Teacher - Physical Education (p 127).

Health Information Manager

$1,812 | Very high skill | Decline

Health information managers combine knowledge of healthcare processes, health records and administration, information management and human resource management to provide services that meet the medical, legal, ethical and administrative requirements of the healthcare system.

Health information managers:

- plan and develop health information systems for various types of healthcare facilities, including computerised patient identification systems, coding and analysis of diseases and procedures, and the design of health record forms
- revise and test the effectiveness of existing health information record services in hospitals and other healthcare facilities
- develop and implement new policies and procedures for handling health information in accordance with professional ethics, institutional requirements and relevant legislation, including the Freedom of Information Act
- select, supervise and manage staff
- instruct health record service and other staff in the policies and procedures associated with the control, use and retrieval of health information
- develop in-service training programs for health record and other health professional staff
- control the transfer of relevant health service data to state health departments
- perform management functions such as workplace design, financial planning, budgetary control, quality assurance, and selection of equipment and supplies
- assist with medical research and healthcare projects.

Health information managers usually work in hospitals or other healthcare facilities where they liaise with doctors, nurses, other health professionals and administrative staff. They may have some contact with the public. Some positions involve substantial managerial responsibility.

Specialisations

- Health Informatician

Personal Requirements

- Organisational ability
- Potential to manage staff
- Good written and oral communication skills

Education and Training

To become a health information manager you usually have to complete a degree in science or health science with a major in health information management. Alternatively, you can complete a degree in a related field followed by a postgraduate qualification in health information management.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, biology, chemistry, physics and mathematics are normally required. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking professional placements required by courses, students will need to obtain a National Police Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.

Students and graduates of accredited courses can apply for membership of the Health Information Management Association of Australia (HIMAA).

Employment Opportunities

Health information managers are mostly employed by public and private hospitals. Other areas of employment include medical research centres, government health departments, cancer registries, group medical practices and private employers such as computer companies, imaging consultants, educational facilities and professional bodies.

Employment prospects for health information managers are impacted by technological advances and more sophisticated health data.

Related Jobs

Archivist (p 185); Hospital Administrator (p 175).

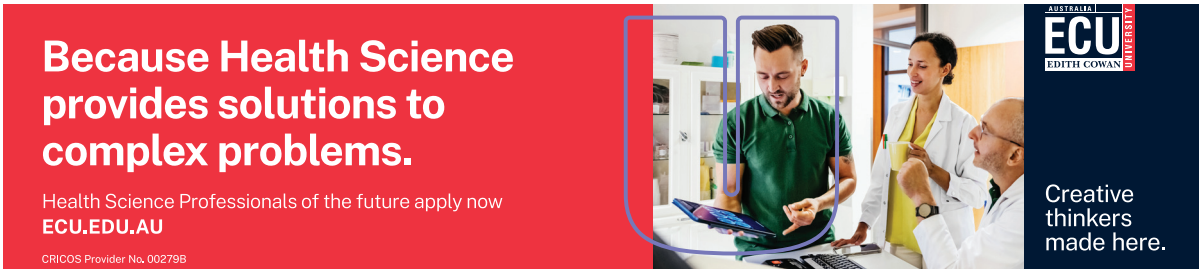
Health Promotion Practitioner

$1,876 | Very high skill | Very strong

Health promotion practitioners plan projects to improve the health of individuals and the community.

Health promotion practitioners:

- plan and coordinate health promotion programs for community groups
- provide health education and teach skills to help people make informed health decisions
- plan and advocate for environmental changes to support healthy lifestyle choices
- support organisations to develop policies that build healthier communities, workplaces and environments
- supervise and coordinate community workers and volunteers



- develop local and national campaigns covering issues such as nutrition, exercise, drugs and sexual health, and implement these within the community
- evaluate projects and initiatives to measure their success and potential for improvement.

Health promotion practitioners are often required to work outside of normal business hours, and may need to travel.

Personal Requirements

- Good oral and written communication skills
- Good negotiation skills
- Able to relate to people from varied backgrounds
- Able to work independently or as part of a team

Education and Training

To become a health promotion practitioner you usually have to study health promotion or public health at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Health promotion practitioners are employed by local, state and federal government departments; health agencies; community services; tertiary institutions; not-for-profit organisations; businesses; and peak bodies.

With experience, health promotion practitioners may progress to team leader, coordinator and managerial roles. Employment opportunities are affected by the level of government funding allocated to health promotion and may be offered on a contract basis.

Related Jobs

Community Worker (p 249); Dietitian (p 171); Environmental Health Officer (p 30); Midwife (p 177); Nurse - Enrolled (p 212); Nurse - Registered (p 212); Nutritionist (p 178); Psychologist (p 220); Social Worker (p 250); Training Officer (p 131); Veterinarian (p 337); Welfare Worker (p 250).

Hospital Administrator

Very high skill

Stable

Hospital administrators plan, direct and coordinate health and administrative services provided by hospitals, community health services, aged-care facilities, private healthcare facilities and other health service organisations.

Hospital administrators:

- prepare annual funding estimates, forecasting the demand for services and allocating budgets
- improve and maintain delivery of health services by planning the services and accounting for the cost of care and the distribution of staff
- represent the health service by attending meetings, seminars and functions
- talk to members of the community, local interest groups, politicians, industry associations and the media in relation to the organisation and the services provided
- act as liaison officer between the governing body of the health organisation and health authorities
- manage staff in areas such as cleaning, safety, maintenance, records and accounts
- take part in identifying problems and needs within the health service by attending staff meetings
- liaise with medical and nursing staff
- interpret industrial awards and other regulations concerning staff employment contracts
- develop and implement new policies and procedures
- participate in the promotion of occupational health and safety management within the organisation.

Personal Requirements

- Able to analyse and solve problems
- Good planning, organisational and decision-making skills
- Good communication and interpersonal skills

Education and Training

To become a hospital administrator you usually have to complete a degree in health management at university. You may also consider a degree in business with a health-related major. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Entry to this occupation may be improved if you have work experience in the health industry.

Employment Opportunities

Hospital administrators are employed by public and private hospitals, community health centres, aged-care facilities and other health organisations. Their work may involve strategy, operations and managing clinical practices or entire health systems. Some are employed by health authorities or government departments. They may also work as self-employed consultants.

Demand for this occupation is largely influenced by government funding, and competition for available positions is strong. There is an increasing demand for administrators with postgraduate qualifications, as well as good financial and management skills.

Related Jobs

Human Resources Officer (p 59); Medical Practitioner (p 202); Nurse - Registered (p 212).

Massage Therapist

$1,038

High skill

Very strong

Also known as Masseur/Masseuse , Myotherapist , Soft Tissue Therapist and Sports Therapist

Massage therapists assess and treat the soft tissue of the body for therapeutic purposes.

Massage therapists:

- take a case history and assess the client's physical condition
- massage the soft tissues of the human body, such as muscles, tendons and ligaments, to assist healing
- assess and treat specific injuries and other soft tissue dysfunction, and provide rehabilitation advice
- administer treatments to promote relaxation, improve blood circulation and relieve muscle tension
- use a range of techniques to enhance sports performance and prevent injury
- provide advice about stretching exercises and relaxation techniques.

Massage therapists spend a lot of time standing. Although the work is physically demanding, it requires stamina rather than strength. They employ a range of techniques and complementary aids, such as heat and cold packs, tape and essential oils.

Massage therapists may specialise in one or more of the following techniques:

- Remedial Massage - assists in rehabilitation, pain and injury management.
- Therapeutic or Relaxation Massage - promotes wellbeing, improves sleep and treats anxiety and tension.
- Sports Massage - treats and prevents injuries, improves recovery and increases flexibility and endurance.
- Structural Bodywork - addresses injuries and dysfunction caused by postural and biomechanical strain.
- Oncology, Palliative Care and Geriatric Massage - supports the primary care of patients with chronic illnesses, such as cancer.
- Pregnancy and Paediatric Massage - supports the primary care of pregnant women and infants.

Personal Requirements

- Physical stamina
- Manual coordination, dexterity and sensitivity
- Patience and concern for people
- A responsible and mature attitude

Education and Training

To become a massage therapist you usually have to complete a VET qualification. Applicants may be required to attend an interview and obtain a National Police Certificate. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a massage therapist through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Massage therapy is not a registered health profession. However, bodies, such as the Association of Massage Therapists, set professional standards for the industry.

Massage therapists wishing to offer health fund rebates to private health fund members must have completed a Diploma of Remedial Massage.

Employment Opportunities

Massage therapists may be employed in health and fitness clinics, sports clubs, gyms, medical centres and multidisciplinary healthcare practices. They may also find employment with other healthcare practitioners such as chiropractors, physiotherapists and osteopaths. Most massage therapists are self-employed or contract between clinics. There has been a recent increase in employment opportunities in hospitals, particularly in palliative care.

An increase in demand for massage therapists is expected as chiropractors and physiotherapists utilise massage therapy to complement their treatments. The field of sports injury treatment and injury prevention is a growth area. There are also opportunities for massage therapists specialising in relaxation techniques to work at day spas, health retreats and holiday resorts.

Related Jobs

Beauty Therapist (p 277); Chinese Medicine Practitioner (p 201).

Medical Imaging Technologist

Also known as Radiographer

Medical imaging technologists operate X-ray and other imaging equipment, such as magnetic resonance imaging (MRI) and ultrasound, to produce radiographic images that are used in the diagnosis and subsequent management of disease or injury. Experienced medical imaging technologists may be able to develop further skills in image interpretation.

Medical imaging technologists:

- receive and interpret requests from medical practitioners for X-ray examinations to be performed on patients
- determine the appropriate imaging techniques to provide doctors with diagnostic information
- calculate details of procedures (such as length and intensity of exposure to radiation) and settings of recording equipment
- explain procedures to patients and address any concerns they have about radiation processes
- ensure patients undergo the correct preparation for the procedure
- correctly position the patient and imaging equipment to obtain the best image of the area being examined
- ensure the patient's welfare during the examination, particularly their exposure to radiation
- develop the X-ray films
- inspect images to determine if any further views are necessary
- operate special equipment such as fluoroscopy equipment (which gives a moving image of the part being examined), angiography equipment (which gives images of blood vessels) and computed tomography (CT) equipment (which gives cross-sectional images of the body).

Medical imaging technologists who are employed in hospitals may work in the radiology department, use mobile X-ray units at patients' bedsides or work in an operating theatre. They work as part of a team with other healthcare professionals, medical staff and nursing staff. Hours of work may involve weekend or shiftwork. Participation in an on-call roster for after-hours emergencies may also be required.

Specialisations

- MRI Radiographer
- Sonographer

Personal Requirements

- Aptitude for science
- Able to work accurately
- Able to work as part of a team
- Eye for detail
- Enjoy helping people

Education and Training

To become a medical imaging technologist you usually have to complete a degree in medical radiation science or medical imaging at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. You may be required to attend an interview. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Depending on the length of the university course, some graduates are required to complete a year of clinical practice in an accredited radiology department. Those completing a four-year degree with the necessary clinical component are not required to undertake this additional year. Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Children. Contact the institutions you are interested in for more information.

You must also obtain a licence to operate radiation equipment from the regulatory body in your state or territory.

Employment Opportunities

Medical imaging technologists are employed in public and private hospitals, as well as private radiology practices in metropolitan and rural locations.

Demand for medical imaging technologists has grown over the past few years. This has mainly been due to new and expanding techniques such as MRI and ultrasound, which aid in the diagnosis and treatment of various medical conditions.

Related Jobs

Cardiac Technologist (p 169); Operating Theatre Technician (p 179); Radiation Therapist (p 179).

Medical Laboratory Technician

Medical laboratory technicians carry out routine laboratory tests and other procedures used in the diagnosis and treatment of diseases and disorders of the human body.

Medical laboratory technicians:

- set up equipment used in the laboratory and clean it after use
- prepare and stain slides of microorganisms for microscopic examination
- under supervision, collect blood samples, perform blood counts and carry out tests to determine bleeding, coagulation time, blood types and other characteristics
- communicate results of tests to the medical officers who have requested them.

Medical laboratory technicians work as part of a team with doctors, scientists and laboratory assistants.

Some areas in which medical laboratory technicians may work are:

- Anatomical Pathology where they process samples of tissue that have been surgically removed from the body so that the pathologist may make a diagnosis.
- Clinical Chemistry (Biochemistry) where they test blood and body fluids to determine abnormalities, often using specialised instrumentation.
- Cytology where they prepare and stain smears of body tissues or fluids and examine them with a microscope, looking for cancer or cell changes that may lead to cancer.
- Haematology where they examine blood, determine its type, perform blood counts and generally assist in the study of blood and its disorders in order to diagnose diseases such as leukaemia and iron deficiency anaemia.
- Medical Microbiology where they receive samples such as wound swabs, urine and faeces, help to isolate and identify microorganisms associated with various diseases and infections, and examine samples for evidence of these microorganisms.

Specialisations

- Phlebotomist

Personal Requirements

- Attention to detail
- Able to work accurately and with minimal supervision
- Able to do repetitive work without losing concentration

Education and Training

To become a medical laboratory technician you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a medical laboratory technician through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Medical laboratory technicians are employed primarily in pathology practices or hospital laboratories. There are also opportunities with other government authorities such as agriculture departments and the Commonwealth Scientific and Industrial Research Organisation (CSIRO), and at universities.

Related Jobs

Anaesthetic Technician (p 168); Biochemist (p 233); Medical Scientist (p 203).

Natural Therapist

Natural therapists specialise in a range of complementary and alternative medical techniques and remedies (including homeopathy, herbalism and aromatherapy), which they use to diagnose, treat and prevent physical illness or dysfunction.

Natural therapists:

- analyse patients' eating habits and develop personalised nutrition plans
- prescribe natural medicines such as herbal remedies, vitamin compounds and mineral supplements
- use organic techniques to stimulate the body's capacity for self-healing
- examine the iris (the coloured part of the eye) to analyse and treat illness in various organs of the body (known as iridology).

Specialisations

- Aromatherapist
- Herbalist
- Homeopath
- Kinesiologist
- Naturopath

Personal Requirements

- Desire to help people achieve good health
- Committed to promoting complementary and alternative medicine as a complement to conventional medical treatments
- A mature and confident personality
- Good communication skills

Education and Training

To become a natural therapist you usually have to complete a VET qualification. You may be required to attend an interview. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Additional Information

Natural therapy is not a registered health profession. However, national professional bodies such as the Australian Traditional Medicine Society and the Australian Natural Therapists Association set standards for membership.

Employment Opportunities

Natural therapists usually work in private practice, and success depends largely on the local community's willingness to receive complementary and alternative medical treatments. Other career options include employment in group practices, research, consultancy, government agencies or in industries such as health food and natural products.

Related Jobs

Chinese Medicine Practitioner (p 201); Chiropractor (p 224); Massage Therapist (p 175); Nutritionist (p 178).

Nutritionist

Nutritionists study and provide advice about dietary habits to encourage the achievement of a healthy lifestyle.

Nutritionists:

- consult with individuals and groups, including sportspeople, about their dietary habits and assess potential nutritional deficiencies
- prescribe diet plans based on the assessment of nutritional needs
- liaise with other health professionals about nutrition, including controlled diets for people with special needs
- monitor clients' progress and quality of food to provide ongoing nutritional care
- collect, organise and analyse data relating to the health and nutrition behaviours of specific groups and the population as a whole
- plan, conduct and evaluate nutrition intervention programs and compile educational material.

Nutritionists may have a high level of contact with the public.

Personal Requirements

- Enjoy food and food preparation
- Interested in health and wellbeing
- Good communication skills
- Able to work as part of a team
- Aptitude for science and research

Education and Training

To become a nutritionist you usually have to study nutrition, science, health science or applied science at university with a major in nutrition. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical or professional placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information. Student membership is available with Nutrition Australia or the Nutrition Society of Australia. Contact the relevant association for details on the types of membership available.

Employment Opportunities

Nutritionists work in a diverse range of food and health areas, including public nutrition and health education, private practice and consultancy, food industries, health promotion and marketing, teaching and research. There may be opportunities for some nutritionists to specialise in working with animals and the provision of dietary and nutrition advice. Some nutritionists work on a part-time basis. Opportunities for nutritionists depend on the recognition of nutrition by the community as a health strategy in preventing and treating diet-related disorders and medical conditions, such as heart disease, cancer and diabetes. The level of public and professional awareness and acceptance of nutrition services have an effect on the demand for nutritionists.

Related Jobs

Food Technician (p 236); Food Technologist (p 237); Natural Therapist (p 177).

Occupational Health and Safety Officer

Also known as Occupational Health and Safety Coordinator and addition name

Occupational health and safety officers coordinate health and safety systems in an organisation. They identify hazards, assess risks to health and safety, put appropriate safety controls in place and provide advice about accident prevention and occupational health to management and employees. With experience and sometimes further training, occupational health and safety officers may become auditors, who inspect a workplace's level of compliance with health and safety standards.

Occupational health and safety officers:

- promote occupational health and safety within an organisation and develop safer and healthier ways of working
- inspect workplaces and workplace equipment, such as scaffolding, to ensure they meet safety regulations and to identify hazards and risks
- ensure that workplaces conform with organisational procedures and safety standards
- work with engineers and other professionals to ensure the safety of worksites and work practices
- ensure personal protective equipment (such as hearing protection, dust masks, safety glasses, footwear and safety helmets), is being used in workplaces according to regulations
- ensure dangerous materials are correctly stored
- identify and test work areas for potential accident and health hazards, such as toxic fumes and explosive gas-air mixtures, and implement appropriate control measures
- ensure an organisation is aware of, and complies with, all legislation relating to its duty of care, workplace activities and the use of its plant, equipment and substances

- record and report hazards, accidents, injuries and health issues within the workplace
- assist with the investigation of accidents and unsafe working conditions, study possible causes and recommend remedial action
- conduct training sessions for management, supervisors and workers on health and safety practices and legislation
- assist with the rehabilitation of workers after accidents or injuries and make sure they experience a satisfactory return to work
- coordinate emergency procedures, mine rescues, firefighting and first aid crews
- communicate frequently with management to report on the status of occupational health and safety programs
- develop occupational health and safety systems, including policies, procedures and manuals.

With experience and sometimes further training, occupational health and safety officers may become auditors, who inspect a workplace's level of compliance with health and safety standards.

Specialisations

- Hazardous Materials/Dangerous Goods Safety Officer
- Occupational Health and Safety Trainer
- Occupational/Industrial Hygienist

Personal Requirements

- Tactful and diplomatic
- Able to work independently or as part of a team
- Good communication and interpersonal skills
- Discretion and respect for confidentiality and privacy
- Integrity and honesty

Education and Training

To become an occupational health and safety officer you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you have a degree in occupational health and safety or health science. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Qualifications in first aid are helpful and may be essential in some cases.

Employment Opportunities

Traditionally, occupational health and safety officers have been employed in the manufacturing, construction, health and minerals industries. Positions are now becoming available in management consultancies and large commercial institutions, such as banks, hospitals, insurance companies, government organisations and service-based organisations.

In large workplaces, personnel departments may employ a number of occupational health and safety officers. In small organisations, the personnel officer often combines the duties of occupational health and safety officer with other duties.

Related Jobs

Management Consultant (p 61); Occupational Therapist (p 225); Public Servant - Australian Public Service (p 163); Quality Assurance Inspector (p 314); Safety Inspector (p undefined); Trade Union Official (p 327).

Operating Theatre Technician

Operating theatre technicians prepare and maintain operating theatres and equipment, assist surgical and anaesthetic teams during operations, and provide support to patients in recovery.

Operating theatre technicians:

- transport patients to and from the theatre and wards
- assist in preparing operating rooms for surgery
- set up, check, connect and adjust surgical equipment
- provide technical assistance to surgeons, surgical nurses and anaesthetists
- clean and restock the operating room, arranging instruments, supplies and equipment according to instruction
- position patients for surgical and anaesthetic treatments.

Operating theatre technicians usually work closely within a team in a restricted physical environment.

Personal Requirements

- Good communication and people skills
- Attention to detail
- Able to work under pressure
- Able to work accurately and with minimal supervision
- Able to work as part of a team
- Organised and methodical
- Good general health and fitness

Education and Training

To become an operating theatre technician you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become an operating theatre technician through a traineeship in Health Services Assistance. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Operating theatre technicians work in hospital or healthcare settings. Some work in day surgeries, endoscopy clinics and eye surgeries.

With experience and further training, operating theatre technicians may progress to higher graded roles.

Related Jobs

Audiometrist (p 169); Biomedical Engineer (p 233); Medical Imaging Technologist (p 176); Medical Scientist (p 203); Nurse - Enrolled (p 212); Radiation Therapist (p 179); Ward Assistant (p 181).

Radiation Therapist

Radiation therapists design, plan and administer radiation treatment to cancer patients, and provide related care to patients in conjunction with radiation oncologists or other medical specialists.

Radiation therapists:

- provide explanations and information to patients about radiation therapy treatment, its possible side effects and self-care procedures

- coordinate the various activities that make up the patient's treatment and care plan
- use simulators, CT scanners and other medical imaging equipment to identify and define the anatomy to be treated and those to be avoided
- devise a treatment plan that will deliver the optimum radiation dose to the target anatomy and minimise dose to unaffected anatomy
- calculate the treatment machine settings, associated equipment and computer verification systems to deliver the radiation dose as prescribed by the radiation oncologist
- administer the radiation treatment and record the delivered dosage into patients' record sheets
- monitor and assess the patient's wellbeing before, during and after the treatment, taking particular note of side effects of treatment
- participate in research and development activities and clinical trials
- supervise and train students allocated from universities in the practical aspects of radiation therapy
- commit to the Continuing Professional Development Program (which is mandatory for registration).

Radiation therapists work in hospitals and/or radiation oncology centres. They work in teams that include radiation oncologists, nurses, medical physicists, engineers and technicians, data managers and administrative staff. They are involved in the day-to-day treatment of cancer patients.

Personal Requirements

- Interest and ability in science
- Attention to detail
- Able to work neatly and accurately
- Good oral and written communication skills
- Able to work as part of a team
- Aptitude for working with computers
- Patient and empathetic towards others
- Supportive and professional approach when treating cancer patients

Education and Training

To become a radiation therapist you have to study radiation therapy at university. To get into these courses you need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Depending on the length of the university course, some graduates are required to complete a year of clinical practice in an accredited radiation oncology department. Those completing a four-year degree with the necessary clinical component are not required to undertake this additional year. Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.

It is a legal requirement for graduates to be registered with the Medical Radiation Practice Board of Australia before practising as a radiation therapist in any state or territory of Australia. For full details, see the Medical Radiation Practice Board of Australia's website. You must obtain a licence to operate radiation equipment from the appropriate state or territory authority.

Employment Opportunities

Radiation therapy treatment centres can be found in major cities and rural locations. The career structure for radiation therapists allows for professional development and promotion in technical, research and managerial areas. Factors that influence demand for this occupation include government funding and health policy, advances in medicine and technology, ageing of the population and the incidence of cancer.

Related Jobs

Operating Theatre Technician (p 179).

Therapy Aide

Therapy aides assist professional staff by visiting clients, preparing written and verbal reports, and helping clients and carers with personal care tasks.

Therapy aides:

- provide general care, comfort and ongoing therapy to patients as directed
- assist patients with recreational and leisure activities
- instruct and assist people with a disability with self-care and daily living activities
- assist patients with performing routine physiotherapy or hydrotherapy exercises on an individual or group basis
- report on action taken, client progress and any unusual circumstances.

Therapy aides are not qualified to diagnose conditions or prescribe treatment. They work under the direction of professional staff such as doctors, physiotherapists, speech pathologists, nurses, home economists, occupational therapists, diversional therapists and social workers.

Personal Requirements

- Emotional maturity
- Able to relate well to frail, sick or people with disability of all ages
- Caring, understanding, patient and calm

Education and Training

You can work as a therapy aide without formal qualifications. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications and you may like to consider a VET course. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a therapy aide through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

A Provide First Aid Certificate is usually required.

Employment Opportunities

Therapy aides work in hospitals and hospices, physiotherapy and occupational therapy practices and private homes. They also work in community health centres, aged-care facilities, respite care, clinics and private practices.

Employment prospects are expected to grow due to the ageing of the population.

Related Jobs

Aged Care Worker (p 167).

Ward Assistant

Also known as Hospital Porter and Orderly

Ward assistants help allied health professionals and staff in hospitals and other healthcare establishments with non-medical duties including housekeeping, food service and transportation, and ward, patient and office support.

Ward assistants:

- make sure that an adequate supply of clean clothing and linen is available for patients and that soiled items are removed and cleaned
- assist in maintaining stocks of linen and non-medical supplies
- assist with lifting and turning patients and transporting them in wheelchairs or on movable beds
- clean rooms such as bathrooms, showers, utility rooms and offices, and clean interior windows
- mop and buff floors, vacuum carpets, remove rubbish and linen, and dust all areas
- clean equipment in the pan room such as pan trolleys, buckets, pans, bowls, suction bottles and tubing, commodes, wheelchairs, seats and rinse trays
- clean patients' lockers and tables
- distribute and collect food trays, check food orders and replenish refrigerator supplies
- accompany patients who are ready to be discharged to the central waiting area
- transport equipment, X-rays and patient records between wards, departments and theatres
- transport deceased patients from wards to the morgue
- assist in emergencies and patient restraint.

Ward assistants work rostered shifts which include night and weekend work. They are on their feet for most of the day. In large hospitals, ward assistants may work in a particular department such as outpatients or maternity. In smaller institutions, they may assist in several or all departments.

Personal Requirements

- Able to cope with the physical demands of the job
- Able to lift heavy objects
- Caring and supportive attitude
- Respect for the rights of others
- Able to perform domestic duties efficiently
- Good communication skills
- Able to work as part of a team
- Able to follow instructions

Education and Training

You can work as a ward assistant without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have qualifications and you may like to consider a VET course. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a ward assistant through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Ward assistants work in public and private hospitals, aged-care facilities, hospices, some health clinics and after-care centres.

Related Jobs

Cleaner (p 259); Dietary Aide (p 171); Nurse - Enrolled (p 212); Operating Theatre Technician (p 179); Therapy Aide (p 180).

Wellness Officer

Also known as Wellness Consultant and Wellness Coach

Wellness officers plan, execute and monitor strategies to improve staff culture, morale and happiness in the workplace.

Wellness officers:

- Implement wellness initiatives, such as programs on exercise, mindfulness and meditation
- Speak with employees about wellbeing, health and morale issues
- Communicate employee feedback to senior management
- Measure return on investment on wellness initiatives

Wellness officers work primarily in corporate environments, usually in an office setting.

Personal Requirements

- Excellent interpersonal and communication skills
- Organisational skills
- Knowledge of health and wellness principles
- Emotional maturity and empathy for others
- Interested in people and human behaviour

Education and Training

To become a wellness officer, you usually have to complete a degree at university. However, as this is a relatively new area, the type of degree required can range from public health and health science to psychology and social work. To get into these courses, you usually need to gain your Senior Secondary Certificate of Education. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

For further details, visit gooduniversitiesguide.com.au.

Employment Opportunities

Wellness officers are employed by private organisations in a variety of industries. They also work in government departments and can be hired as consultants.

Humanities & social sciences

This is one of the largest and most complicated fields of study, with many courses leading to a broad range of careers and further study options. It comprises two main sections: humanities and social sciences, and languages.

Courses and specialisations

Humanities and social sciences

Some of the majors you can study include ancient cultures, anthropology, counselling, information management, international studies, museum studies, philosophy, political science, sociology and youth work.

Languages

Since language studies are often found in the most common of all degrees — such as the Bachelor of Arts and Bachelor of Business — they are readily available at campuses throughout the country.

If you're interested in language, you can consider studying English or linguistics — each looking at language in very different ways.

Where to study

Courses are available at just about every campus in the country, but even those with the same name differ a great deal from one campus to another in their focus and specialisations.

For example, when looking at language courses, some study the history, culture and even the economics of the societies in which the languages are used, as well as the languages themselves.

There are also other things to keep in mind — are native speakers freely available? Does the institution run study tours or summer schools in other countries? If not, do they have other ways of teaching the language in context? Do they subsidise exchange trips to study in other countries, which may be essential for advanced learning?

Five-star universities

Educational experience

BOND	93.1%
ECU	87.3%
UNE	87.0%
CSU	84.9%
DEAKIN	83.8%
UniSA	83.8%
SUNSHINE COAST	83.4%
AVONDALE	83.1%
CDU	82.9%
GRIFFITH	82.6%

National average 77.7%

Graduate employment

DIVINITY	80.2%
CSU	78.9%
CDU	73.0%
UTS	72.4%
UNSW	69.8%
UNE	69.1%
SYDNEY	68.4%
MONASH	68.2%
ANU	68.0%
ACU	68.0%
MURDOCH	67.5%

National average 63.8%

Learner engagement

BOND	90.3%
AVONDALE	74.0%
FLINDERS	64.6%
NOTRE DAME	64.1%
SUNSHINE COAST	60.5%
UWA	59.1%
ADELAIDE	57.1%
ANU	56.2%
ECU	55.9%
UTS	55.7%

National average 48.7%

Learning resources

BOND	95.5%
ECU	90.3%
CQUni	89.8%
DEAKIN	89.7%
ACU	89.3%
SUNSHINE COAST	88.5%
JCU	88.4%
FLINDERS	88.3%

National average 83.8%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

11,432
Undergraduate

37,575
Postgraduate

6,636
International undergraduate

What can I do?

- Counselling
- Disability care
- Librarian
- Politics
- Historian
- Research

Graduate starting salary

$39,100
Undergraduate

$54,100
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

63.8%
Undergraduate

80.5%
Postgraduate

Five-star universities

Median starting salary

UTS	$54,800
CDU	$54,400
CSU	$53,200
CANBERRA	$50,600
FLINDERS	$50,400
NOTRE DAME	$49,200
FEDERATION	$49,100
MACQUARIE	$47,700

National average
$39,100

Skills development

BOND	94.2%
ECU	92.6%
NOTRE DAME	87.9%
UniSA	87.2%
ACU	85.5%
FLINDERS	84.5%
RMIT	83.0%
AVONDALE	82.8%
DEAKIN	82.8%

National average
80.3%

Student support

BOND	94.1%
ECU	86.1%
CSU	85.2%
CQUni	85.0%
DIVINITY	85.0%
UNE	84.5%
UniSA	83.9%
AVONDALE	82.6%

National average
72.3%

Teaching quality

BOND	95.8%
ECU	92.9%
UNE	90.6%
CDU	90.1%
CQUni	89.3%
NOTRE DAME	87.9%
SWINBURNE	87.8%
UniSA	87.8%
CSU	87.7%
DEAKIN	87.6%
SUNSHINE COAST	87.5%

National average
84.5%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Anthropologist

$1,942 Very high skill Moderate

Anthropologists study the origin, development and functioning of human societies and cultures, as they exist now or have existed throughout history. Anthropologists are concerned with the complexities of social and cultural life, including religion, rituals, family and kinship systems, languages, art, music, symbolism and economic and political systems.

An anthropologist:

- works in different communities to gather and analyse information on the social and cultural behaviour, artefacts, language and biology of groups and societies that they are studying
- collects, identifies, dates, protects and preserves indigenous artefacts,material possessions and other objects of anthropological interest.

An anthropologist's main research method is long-term fieldwork, which involves living with the people being studied and learning through participation in activities, often under difficult conditions. There is considerable overlap in the areas of specialisation in anthropology. For this reason, specialist anthropologists sometimes conduct joint research.

There is considerable overlap in the areas of specialisation in anthropology. For this reason, specialist anthropologists sometimes conduct joint research.

Specialisations

- Applied Anthropologist
- Biological/Physical Anthropologist
- Linguistic Anthropologist
- Social/Cultural Anthropologist

Personal Requirements

- Capacity for detailed observation and accurate practical work
- Able to work independently
- Enthusiasm for research
- Good oral and written communication skills
- Sensitive to other people and cultures.

Education and Training

To become an anthropologist you usually have to complete a degree in science, arts, social science or international studies at university with a major in anthropology (preferably at honours level), followed by a postgraduate qualification in anthropology. To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education with English. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree with honours. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

In collecting information about a society, anthropologists may have to learn another language.

Ordinary membership of the Australian Anthropological Society is open to people who have completed an honours degree in anthropology.

Employment Opportunities

The major employers of anthropologists are universities, museums and government departments concerned with Aboriginal welfare and Native Title, immigration and ethnic affairs, multiculturalism and social services. They are also employed by development and conservation organisations, including United Nations agencies and other non-government organisations. Some graduates become secondary teachers, and a smaller number of graduates are employed by universities as part-time tutors while they gain postgraduate qualifications. A growing number of positions are available at Aboriginal Land Council offices or in research relating to Native Title claims and heritage clearance. Positions are advertised in government gazettes, newspapers, professional journals and on various websites. In recent times, there has been an increase in anthropological consultancy work funded by both government and private industry, leading to the formation of a number of anthropological and archaeological companies.

Related Jobs

Archaeologist (p 184); Cultural Heritage Officer (p 187); Museum Curator (p 189).

Archaeologist

$1,942 Very high skill Moderate

Archaeologists study past human societies by recovering, recording, analysing and interpreting material remains and other important evidence, such as cultural artefacts, food remains, skeletal remains, environmental evidence and landscapes.

Archaeologists:

- liaise with Indigenous and non-Indigenous community groups
- survey, map and record archaeological sites
- organise and carry out excavations, field surveys and surface collections
- clean, conserve, restore, reconstruct and display material found at archaeological sites
- photograph or draw features and artefacts on site and during post-excavation analysis
- analyse findings through a variety of means, including physical and chemical techniques and documentary research
- document the information obtained from the findings in a concise report
- advise individuals and groups on heritage matters, including conservation options and legal provisions
- prepare material for publication.

Archaeologists may work with a variety of people on excavations, including Indigenous groups, academics from related areas, technical staff, people who live in the vicinity of the archaeological sites, labourers and other workers under their direction.

Archaeologists are increasingly using technologies such as geophysical survey devices, geographic information systems (GIS), web-based communication platforms and global positioning system (GPS) devices.

Archaeologists work both indoors and outdoors, in varying locations across Australia and internationally.

Archaeologists may specialise in particular geographic regions or areas of study, such as the identification of animal skeletal or plant remains.

Personal Requirements

- Patient, determined and able to persevere
- An eye for detail
- Enjoy science and history
- Enthusiasm for research

- Strong writing skills
- Aptitude for working with computers
- Able to work as part of a team
- Prepared to endure potentially rough and isolated living conditions for extended periods while involved in fieldwork
- Able to remain objective

Education and Training

To become an archaeologist you usually have to complete a degree at university with a major in archaeology, followed by a postgraduate qualification in archaeology or cultural heritage. To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education with English. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Traditionally, archaeologists were mainly employed as academics in universities and museums. Many archaeologists in Australia are employed in the cultural heritage management field and use their expertise to minimise the impacts of development projects on sites of cultural heritage significance. A variety of government departments, Indigenous groups and representative bodies employ archaeologists in this capacity, while some are employed as researchers in universities.

Although competition for positions is strong, in recent years there has been an increasing demand for qualified graduates. Most of this demand comes from cultural heritage firms working in the development industry. Undertaking voluntary work during your degree may increase the possibility of gaining a job in this field. Many universities offer field schools and volunteer or work placement opportunities to help students gain such experience.

Related Jobs

Conservator (p 186); Cultural Heritage Officer (p 187); Museum Curator (p 189).

Archivist

$1,812 | Very high skill | Decline

Archivists analyse and document records. They also plan and perform procedures for the safekeeping of records and historically valuable documents. This may include working closely with written records, files, maps, plans, letters, books, certificates, diaries and registers. Records also include other media such as photographs, films, sound recordings, microfilms and electronic or computer records.

Archivists:

- determine how long records need to be kept for accountability and historical purposes by following specified record-keeping requirements
- ensure records necessary for the ongoing operations of an organisation are identified and preserved
- survey records held by client agencies and individuals, and arrange for their transfer to archival custody
- collect records in accordance with an acquisitions policy
- establish and manage digitisation initiatives to make records more accessible online
- plan for and carry out digital preservation activities on 'born digital' records (materials that originate in digital form)
- establish and manage administrative systems to document and control records and archives
- provide access to records through reading rooms and online archives for research, administrative, legal and other purposes
- provide advice and information on issues such as copyright and privacy
- research publications or prepare exhibitions using archival records
- promote collections and engage with users through educational programs, exhibitions, publications and the web
- ensure that the environmental conditions required for the storage and conservation of records are maintained according to scientific methods.

Personal Requirements

- Enthusiasm for research and analysis
- Good oral and written communication skills
- Good liaison and negotiation skills
- Good organisational skills
- Able to undertake highly detailed work
- Interested in the preservation and accurate management of records
- Aptitude for using computers
- Able to work independently
- Interested in history
- Able to accept responsibility

Education and Training

To become an archivist you usually have to study humanities, social sciences or information management at university, followed by a postgraduate qualification in records management and archives, information studies, information science or information services. To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

In some cases it may be possible to become an archivist through relevant work experience. Government archives in particular may offer alternative entry schemes and in-house training.

The Australian Society of Archivists is the professional organisation for archivists in Australia. Associate membership is open to anyone who supports the aims of the society, including students. Professional membership is available to graduates who have been employed as an archivist in a recognised institution for two years, or to anyone holding a postgraduate professional qualification recognised by the society who has been employed as an archivist for one year. Visit their website for further information.

Employment Opportunities

The two major employers of archivists are the federal and state or territory governments. Archivists are also employed by statutory authorities, local government councils, universities and other tertiary institutions, schools, churches, banks, building societies and some large commercial companies. There are also some opportunities for private consultancy work.

Related Jobs

Historian (p 187); Research Officer (p 244).

Conservator

Also known as Art Restorer

Conservators plan, organise and undertake the preservation and conservation of materials and objects in private, public and community collections, including libraries, archives, museums, art galleries, art centres, and historical and archaeological sites. Conservators specialise in a range of areas, including paper, paintings, photographs, social and cultural artefacts, bookbinding and archives, furniture, archaeological materials, buildings and historic sites, outdoor sculpture and large technology objects, textiles and preventative conservation.

Conservators:

- examine and evaluate the condition of objects and confirm their identification and authenticity
- organise systematic inspection of collections and prepare written and photographic reports
- advise on the optimum storage and display conditions for the objects in their care (such as correct light, relative humidity, integrated pest management and temperature control)
- advise on the correct methods for handling, storing, displaying and transporting works of art and artefacts
- conduct research into the material, technological or historical nature of collections, as well as materials and techniques critical for their preservation and sustainability
- undertake extensive research into deterioration problems within collections in order to inform collections management
- undertake and record the details of conservation and restoration procedures to correct damage or control deterioration.

Personal Requirements

- Patient with the capacity for fine manual work
- Aptitude for science, particularly chemistry and physics
- Aptitude for using computers
- Attention to detail
- Ability to understand and apply professional and ethical codes of conduct
- Artistic interests such as sculpture, painting and drawing
- Aptitude for technical tasks
- Normal colour vision
- Sensitivity to Indigenous and ethnic cultural issues
- Interest in history, art history and materials technology

Education and Training

To become a conservator you usually have to complete a degree in heritage, museums and conservation at university. Alternatively, you can complete a science, arts or fine art degree with a major that is relevant to cultural materials conservation, followed by a Master of Cultural Materials Conservation at the Grimwade Centre for Cultural Materials Conservation. To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Graduates may be eligible for professional membership of the Australian Institute for the Conservation of Cultural Material.

Employment Opportunities

Most conservators are employed in cultural institutions such as museums, libraries, art galleries, archives, historic houses, art centres and cultural, heritage and digital industries. An increasing number of conservators are taking up positions in the private sector. Competition may be strong for the limited number of positions available.

Related Jobs

Archaeologist (p 184); Archivist (p 185); Artist (p 95); Arts Administrator (p 95); Museum Attendant (p 189); Museum Curator (p 189); Taxidermist (p 323).

Criminologist

Criminologists examine the systems by which people accused of crimes are brought to justice, attempt to explain the reasons for criminal behaviour and suggest ways crime might be reduced. Criminologists may specialise in crime prevention, cybercrime, juvenile justice, policing strategies, economic crimes or corrections. They may work in the legal field, ensuring laws keep up with changes in society. They may also work in the social/psychological fields, studying the effects of the criminal justice system or the factors that contribute to offending behaviour by individuals.

Criminologists:

- study the ways in which certain criminal justice agencies operate, including the law courts, police services, prisons and community-based correction centres
- analyse and interpret data received on the incidence of crime and the operation of the justice system
- monitor new and emerging trends in offending and crime
- provide information about crime and the ways in which people are processed by the criminal justice system
- catalogue information about the possible causes of crime and the crimes committed
- compile crime statistics and develop ways in which crimesolving resources can be most effectively used
- analyse and develop crime policy and prevention strategies
- evaluate all aspects of crime and the criminal justice system
- research criminological issues such as those pertaining to offenders, victims of crime and sentencing.

Personal Requirements

- Ability to think analytically and critically
- Personal integrity
- Interested in welfare and human behaviour
- Interested in working with disadvantaged groups

Education and Training

To become a criminologist you usually have to complete a degree in criminology, criminal justice, justice studies, legal studies or psychology. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. A number of institutions in Australia offer degrees in these areas. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Criminologists work in government departments, private industry or tertiary institutions. Many universities employ criminologists as academics to teach criminology, legal studies, law and sociology, as well as to undertake their own research. Federal, state and

territory justice agencies employ criminologists as research officers and policy advisers. They also work in agencies involved with policy, law reform, juvenile justice, crime statistics and adult corrections. These include the Australian Institute of Criminology, the federal Criminal Law and Law Enforcement Branch, police departments, courts and corrective institutions. Private welfare agencies and individual corporations such as specialist security firms also employ criminologists.

Related Jobs

Correctional Officer (p 154); Police Officer - Australian Federal Police (p 160); Police Officer - State (p 161); Social Worker (p 250).

Cultural Heritage Officer

Cultural heritage officers are involved in the identification, assessment, conservation and interpretation of places and objects that have cultural heritage value.

Cultural heritage officers:

- develop conservation policy and guidelines
- check and administer legislation
- compile and supply educational information on cultural heritage and conservation
- seek and arrange funding to support heritage applications
- identify, assess and compare the heritage value of objects, places, events and practices, and determine how they acquired their heritage value
- provide advice on proposed projects or activities that may affect cultural heritage sites
- provide advice about the interpretation, conservation and management of places and objects of cultural heritage significance
- prepare thematic histories (studies based on a particular theme in history).

Cultural heritage officers must also develop and regularly update their knowledge of Australian history, Indigenous history and culture, urban/environmental design and one or more areas of specialisation such as prehistory, archaeology, geology, ecology, architecture, visual arts or popular culture.

Personal Requirements

- Interest in objects, events, places and practices of the past and their significance for the present and the future
- An inquiring mind and a capacity for detailed observation and accurate research
- Good written communication skills
- Able to work independently or as part of a team
- Interest in other people and cultures
- Able to prioritise and work under time constraints

Education and Training

To become a cultural heritage officer you usually have to complete an arts or science degree at university with a major in cultural heritage studies, history, Indigenous studies, Australian studies, anthropology or archaeology. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Cultural heritage officers can work as research assistants and officers, project officers, community officers, professional consultants or sub-consultants working as part of a team on a conservation project. They may work in a number of different areas, including the National Trust, heritage councils, museums, historical sites, art galleries, the minerals industry, local councils, private sector consulting organisations, the Australian and state or territory public services and the tourism industry. After completing formal education and gaining practical experience, you may be able to become self-employed as a consultant.

Related Jobs

Architect (p 43); Museum Curator (p 189).

Historian

Historians conduct research into past human activity, including the history of countries, organisations, periods of time, buildings, cultural heritage, particular events, people, and ideas or issues.

Historians:

- examine, assess and interpret evidence of past events by consulting and studying the works of other historians and researchers, using sources of information such as archives, diaries, manuscripts, reports, statistics, artefacts, images, works of art, photographs, letters, newspapers, magazines and journals, and interviewing people
- organise information, check it for accuracy, interpret details, suggest theories and make conclusions
- present findings and conclusions through reports, the media (digital and print), journal articles, books, lectures and museum exhibitions
- act as an adviser or consultant to government, commercial and private organisations, societies, churches and individuals
- perform research and/or teach at institutions such as universities and schools.

Personal Requirements

- An inquiring mind
- Interested in human behaviour, society and politics
- Interested in the lessons of the past
- A thorough approach to research and problem-solving
- Good written communication skills

Education and Training

To become an historian you usually have to study history at university, preferably at honours level. Most historians then undertake a masters or doctoral degree, where they conduct research and, in most instances, write a thesis in their chosen subject area. Subject areas are diverse and include ancient history, Asian history, women's history, Indigenous history, environmental history, economic history, medieval and Renaissance history, public history, applied history, modern history and the history of nations.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education with English. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the universities you are interested in for more information.

Employment Opportunities

Historians are often self-employed, working on a contract basis on a succession of projects across a range of historical subjects and fields. Others are employed as lecturers, tutors and researchers by universities, research institutions, heritage organisations, libraries, museums, archives, advertising agencies, businesses and public record offices. Many work in local, state and federal governments in administrative, research and policy roles where they can use their research and social data analysis skills.

Some undertake further study to gain employment as teachers in secondary schools.

Historians usually specialise in a particular geographical region or period of time and study aspects such as politics, culture, law, ideas, economics or sociology.

Related Jobs

Anthropologist (p 184); Archaeologist (p 184); Archivist (p 185); Cultural Heritage Officer (p 187); Museum Curator (p 189); Research Officer (p 244); Teacher - Secondary (p 129); University Lecturer (p 132).

Interpreter

$1,942

Very high skill

Moderate

Interpreters use their knowledge of languages and cultures to convert a spoken or signed language into another spoken or signed language, usually within a limited time frame and in the presence of the participants who need to communicate. Interpreters usually specialise in a particular language combination (French and English, for example) and may also specialise in a particular subject area, such as commerce, law, health, science, technology or welfare.

Interpreters:

- interpret verbal or signed communications between two parties
- provide simultaneous or consecutive interpretations of conversations or speeches
- express the meaning and feeling of what is said or signed in another language in the appropriate tone and style within a range of settings
- verbally translate written texts.

Personal Requirements

- Excellent command of English
- Fluency or ability to learn at least one other language
- Initiative and research skills
- Good concentration skills
- Good memory
- Able to maintain confidentiality
- Understanding and acceptance of different cultures

Education and Training

To become an interpreter you must be fluent in another language as well as English. You will also need to complete a VET or university qualification. Entry to VET qualifications or degrees usually requires you to gain your Senior Secondary Certificate of Education. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

After completing an appropriate qualification or gaining significant experience you may be able to gain NAATI accreditation. The NAATI levels of accreditation range from Paraprofessional Interpreter and Professional Interpreter to Conference Interpreter and Conference Interpreter (Senior). Both Conference Interpreter accreditations require the high levels of proficiency needed for trade negotiations and international conference. The minimum level of accreditation that NAATI recommends for professional work in Australia is the Professional Interpreter level.

Interpreters need to have a sound knowledge of a wide range of subjects to develop a thorough understanding of the complex issues that are discussed during interpreting assignments.

Employment Opportunities

Interpreters usually work on a freelance basis. They are employed by federal, state or territory government departments concerned with immigration, defence, legal issues and law enforcement, social security and education. Organisations such as hospitals, banks, tourist agencies and private interpreting and translating firms may also employ interpreters on a contract or freelance basis.

Most interpreting positions, such as interpreting in courts or working for the state, territory and federal Translating and Interpreting Services, are on a contract, freelance or casual basis. Permanent opportunities are limited, but are most likely in health and defence. Some highly qualified interpreters work at international conferences, as well as government and/or business meetings.

Related Jobs

Teacher - English as a Second Language (p 126); Translator (p 191).

Librarian

$1,654

Very high skill

Moderate

Librarians design, develop and manage physical and online collections in order to deliver innovative services to users. Library collections can include books and e-books, magazines, images, music and video, maps, newspapers, computer games and other digital resources.

In large libraries, librarians may specialise in areas such as acquisition, research, cataloguing, online services or children's services. They may also work in specialist libraries, including corporate, legal, medical or school libraries, or independently as researchers or knowledge managers.

Librarians:

- develop, manage and digitise collections
- undertake strategic management of information and resources
- select, classify and index library and information resources
- assist users to identify or interpret information
- coordinate and conduct training programs or promotional events to assist and engage library users
- manage and promote library services through websites and social media
- train and supervise other staff
- create and maintain databases and systems for recording loans
- develop and nurture partnerships, such as with faculty, community organisations, learning providers, authors and publishers
- plan and select library infrastructure.

In large libraries, librarians may specialise in areas such as acquisition, research, cataloguing, online services or children's services. They may also work in specialist libraries, including corporate, legal, medical or school libraries, or independently as

researchers or knowledge managers. see the separate entries for Teacher - Primary and Teacher - Secondary for information about becoming a teacher librarian.

Specialisations

- Cataloguer

Personal Requirements

- Good organisational skills
- Good communication skills
- Ability to work with people of all ages from diverse social and cultural backgrounds
- Good problem-solving skills
- Able to work independently or as part of a team
- Strong customer service focus

Education and Training

To become a librarian you usually have to complete a degree at university with a major in information media, information services or information studies. Alternatively, you can undertake a degree in any discipline, followed by a postgraduate qualification in information studies or information management.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Librarians work in public libraries, archives, schools, technical colleges and tertiary institutions. They also work for government departments, museums, research and consulting organisations, teaching hospitals and industrial and business firms, all of which have libraries specialising in particular fields.

Related Jobs

Archivist (p 185); Health Information Manager (p 174); Research Officer (p 244); Teacher - Primary (p 128); Teacher - Secondary (p 129).

Museum Attendant

Museum attendants work in the public spaces of museums, greeting visitors and attending to enquiries, and ensuring the protection of exhibits.

Museum attendants:

- conduct tours of museums or galleries
- answer enquiries
- direct visitors to specific exhibits
- give visitors information about exhibits
- control visitors' access to exhibits
- check that all visitors have departed at closing time
- prevent unauthorised entry
- inspect membership cards, admission passes and tickets
- patrol the museum or gallery to ensure security.

Museum attendants generally work indoors but may be required to travel with exhibitions and displays.

Personal Requirements

- Interested in museums or art galleries
- Able to process large amounts of information
- Outgoing and friendly nature
- Good communication skills
- Able to handle groups of people with ease

Education and Training

You can work as a museum attendant without formal qualifications. You will probably get some informal training on the job. Employers usually prefer those who can demonstrate a genuine interest in the collection. Carrying out volunteer work may improve employment prospects.

You can also become a museum attendant through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Museum attendants are employed in a variety of roles, usually by a museum, but they can also work in other institutions such as galleries, universities or other cultural institutions. Many people volunteer as a museum attendant prior to obtaining paid employment.

Related Jobs

Conservator (p 186); Museum Curator (p 189); Museum Officer (p 190).

Museum Curator

Museum curators look after, manage, organise, display and develop museum collections, and conduct related research. Museum curators usually specialise in a broad discipline, such as anthropology, art, decorative arts, natural history, social history, science or technology. Within that discipline they are generally recognised as authorities on one or more specific subject areas.

Museum curators:

- acquire items for the collections in their care
- examine items to determine condition and authenticity
- identify and classify specimens, and arrange conservation and restoration work
- maintain records about all items in the collection
- organise and participate in display teams, which may involve travelling or arranging for loan exhibitions, or overseeing the organisation of in-house temporary exhibitions or displays
- initiate and maintain research and publication programs
- establish networks and assist other professionals on request
- lecture and write about collections and answer public enquiries
- supervise support staff and organise administrative duties associated with the use and care of collections.

They generally work indoors in museums and art galleries, but they may be required to travel extensively on field study. In small museums, one curator may be responsible for the management of the entire institution and its collections.

Personal Requirements

- Appreciation of the history of science, the environment or the arts
- Patient
- Able to pay attention to detail

- An objective, methodical approach to work
- Good oral and written communication skills
- A good imagination
- Aptitude for research

Education and Training

To become a museum curator you usually have to complete an arts or science degree at university with a major in a relevant area, such as anthropology, archaeology, fine arts, history, cultural studies, astronomy, biology or environmental science (preferably at honours level), followed by a postgraduate qualification in museum studies, curatorship or cultural heritage management.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree and may require previous museum experience. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Curators may be required to travel to seek work.

Related Jobs

Anthropologist (p 184); Museum Attendant (p 189).

Museum Officer

$1,346 | High skill | Decline

Museum officers prepare specimens for collections, and construct and arrange museum and art gallery exhibits.

Museum officers:

- clean fossil specimens, mould and restore skeletal parts, construct skeletal mounts, re-assemble fragmented specimens and create substitute pieces
- construct models and make castings or moulds of artefacts and objects for display purposes
- mount and prepare objects for display according to conservation requirements
- design and build display cases, mounts and other exhibition presentation devices
- design, prepare and install display hardware
- receive, ship, pack and unpack exhibits
- maintain museum files
- supervise and assist other workers in the cleaning, cataloguing, labelling and storing of specimens.

Museum officers work mainly indoors, although extensive fieldwork may be required in some areas.

Personal Requirements

- Patient, with a methodical approach to work
- Able to pay attention to detail
- Aptitude for design

Education and Training

You can work as a museum officer without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have relevant volunteer experience or qualifications and you may like to consider a VET course. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a museum officer through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Most public galleries, museums and National Trust properties have volunteer programs, which usually include training and practical experience. Contact the volunteer coordinator at the organisations you are interested in for details.

Employment Opportunities

Higher positions such as senior museum officer are filled by advertisement, and competition for vacancies is strong. Appointment to a particular level will depend on qualifications and experience. see the separate entry for Conservator for further information.

Related Jobs

Conservator (p 186); Model Maker (p 107); Museum Attendant (p 189); Museum Curator (p 189); Taxidermist (p 323).

Sociologist

$1,942 | Very high skill | Moderate

Sociologists study the development, structure, social patterns and interrelationships of social groups and human societies.

Sociologists:

- observe and investigate social groups and subjects such as family, community, education, industrial relations, crime, politics, minority and ethnic relations, poverty and mass communications
- research, collect and analyse data, generally using computers
- record and interpret facts and figures, and write reports using the data
- undertake systematic interviews of selected individuals
- live in the community being studied to assist their own understanding.

Sociologists may be required to travel to conduct research and consult with other social scientists.

Personal Requirements

- Able to remain objective
- Sensitivity to and interested in social issues
- Good oral and written communication skills
- Aptitude for research
- Able to work independently

Education and Training

To become a sociologist you usually have to complete a degree in arts, humanities or social science at university with a major in sociology. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Sociologists are usually employed as academics and consultants. They may also work as independent authors of both academic and mainstream articles and books. Sociology graduates find employment in a number of related fields of social research, planning, and policy development and evaluation. The private sector is increasingly employing sociologists in the areas of survey research, consultancy, equal opportunity and human resources.

Sociology is relevant to a career in social work, ethnic and social justice affairs, health sciences and correctional and other community services. Students who wish to pursue an academic career should aim to achieve good results in an honours degree, followed by a higher degree by research. Social problems such as unemployment and juvenile crime create demand for sociologists' skills. Demand is also affected by government funding in the public service, education and scientific research areas.

Related Jobs

Anthropologist (p 184); Criminologist (p 186); Historian (p 187); Market Researcher (p 73); Marketing Officer (p 74); Psychologist (p 220); Research Officer (p 244); Social Worker (p 250); Welfare Worker (p 250).

Translator

Translators convert written documents from one language to another while maintaining the precise meaning of the original text. Translators usually specialise in two or more languages. They may also specialise in a particular field of work such as commerce, law, health, science, technology or literature.

Translators:

- study original texts and transcripts of recorded spoken material to understand the subject matter
- translate the meaning and feeling of written material in the appropriate register and style
- translate a wide range of written material, including business letters, application forms, legal texts, novels and detailed scientific articles
- make sure that phraseology and terminology in legal, technical and scientific texts are accurately translated
- supply subtitles for films and television programs
- revise translations done by others.

Personal Requirements

- Excellent command of written English
- Fluency or ability to learn at least one other language
- Understanding of different cultures
- Able to work accurately and objectively
- Initiative and research skills
- Able to maintain confidentiality
- Broad general knowledge

Education and Training

To become a translator you require fluent written language skills in English and fluent reading comprehension of at least one other language. You will also need to complete a VET or university qualification. These courses can help you become qualified by developing the language skills needed to meet the entry requirements for a further course of study in translating.

Entry to VET qualifications or degree courses usually requires you to gain your Senior Secondary Certificate of Education. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

After completing an appropriate qualification or gaining significant experience you may be able to gain accreditation through the National Accreditation Authority for Translators and Interpreters (NAATI). The NAATI levels of accreditation range from Paraprofessional Translator and Professional Translator to Advanced Translator and Advanced Translator (Senior). Both Advanced Translator accreditations require the high levels of proficiency needed for legal and academic texts. The minimum level of accreditation that NAATI recommends for professional work in Australia is the Professional Translator level.

Employment Opportunities

Translators are employed, usually on a freelance basis, by federal, state and territory government departments concerned with immigration, defence, legal issues and law enforcement, social security and education. Organisations such as hospitals, banks, tourist agencies and private interpreting and translating firms may also employ translators on a contract or freelance basis. Permanent employment opportunities are limited, but are most likely found in law, finance and defence.

Most translators in Australia are self-employed or work as freelancers, casuals or contractors. The most successful translators in Australia work for international clients using modern technology to service clients and collaborate with colleagues on projects.

Related Jobs

Public Servant - Australian Public Service (p 163); Teacher - English as a Second Language (p 126).

Writer

Writers plan and write literary or other written work for publication or performance. Writers may create original pieces of written work, which can take the form of poetry, novels, short stories, biographies, blogs, plays or film, radio and television scripts. They may also write for multimedia distribution.

Writers may specialise in fiction writing, general interest non-fiction, journalism, children's books, educational textbooks, historical writing and transferring oral histories into written form, corporate or training videos, technical writing, magazine writing, documentation preparation, freelance editorial services, helping others to prepare manuscripts for publication, scriptwriting, documentary writing, humour, copywriting, editi

Writers:

- choose themes or subjects for written work, conduct research into the subject, assemble background material and obtain other necessary data
- plan and organise material and write the work
- revise or edit the work, making sure that the style is consistent; that there is proper development of theme, plot and characterisation; and that referencing is correct
- set out the original manuscript so that it is clear and legible (typed or word processed, for example) and submit the work to a publisher
- work with other specialists such as scriptwriters, software developers, graphic designers and illustrators, to create multimedia works.

Writers may specialise in fiction writing, general interest non-fiction, journalism, children's books, educational textbooks, historical writing and transferring oral histories into written form, corporate or training videos, technical writing, magazine writing, documentation preparation, freelance editorial services, helping others to prepare manuscripts for publication, scriptwriting, documentary writing, humour, copywriting, editing text into accessible 'plain English' form or writing text for musical works. Work may be commissioned by a book or magazine publisher, a theatre company, a film or television production company, or a radio or television station. Alternatively, work may be sold by the writer or a literary agent acting on the writer's behalf. Writers often work with visual or performance artists. In the business environment, writers can work as communication specialists. They

may design training seminars or packages, facilitate workplace discussions, identify problems in documentation and conduct communication audits.

Personal Requirements

- Observant and inquisitive approach to people and their environment
- Able to think and write creatively and clearly
- Excellent understanding of English, particularly grammar and spelling
- Concentration, perseverance and dedication

Education and Training

You can work as a writer without formal qualifications. Skills are usually developed through practice and experience. However, you will improve your chances of employment by undertaking some associated formal training.

Relevant courses can range from part-time interest courses to university degrees. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Alternatively, you can become a writer by studying a degree in a related area at university. Entry to these courses usually requires you to gain your Senior Secondary Certificate of Education. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

People interested in writing should consider related occupations until they are able to establish themselves in this occupation. This may be in areas such as journalism, editing, teaching and advertising.

Writers are usually self-employed or work under contract. Many publications will have a bank of regular freelance contributors they rely on to provide content. Business writers may be employed by government departments and private businesses. Technical writers are usually employed under contract to publishers. New technologies have increased the expectation that writers have multimedia skills and work on personal computers, submitting their work electronically.

Related Jobs

Blogger (p undefined); Copywriter (p 71); Editor (p 72); Illustrator (p 103); Journalist (p 72); Research Officer (p 244); University Lecturer (p 132).

Law & paralegal studies

Do you have a passion for justice or advocacy? Do you like a good debate? What about reading, research and analysis? Many see law courses as offering a secure career in what can be a high-status profession, but it's important to keep in mind that they are very competitive and involve a great deal of hard work.

Courses and specialisations

Law

Law usually takes around five years to complete and may be offered as a double degree, giving students a broad education that can be applied in several fields.

Law offers a great base to build on for a wide range of jobs, with employers ranging from accounting and law firms and government departments to banks and big business.

Paralegal studies

While law is often front of mind for those considering a career in the legal system, fewer students consider the roles available: legal researcher, compliance officer, contracts administrator, legal secretary, court officer and mediator. Most of the paralegal studies courses are designed to prepare people to enter these occupations, while others focus on areas more closely tied to humanities disciplines.

Where to study

While legal education has improved greatly, a lot of it remains difficult to fully understand. Some schools might be better than others at bringing it to life with problem-based methods. Your school's reputation and your involvement in societies and extracurricular work will be important for your career.

Consider all your options. You could do law as a graduate entry course (such as a Juris Doctor) after you have gained some experience studying or working in a different field. To practise as a lawyer, you must undertake practical training upon completing your degree, either through a traineeship at a law firm or through an approved course, which usually takes at least three months.

Entry into paralegal studies courses is generally easier than law, although the level of difficulty has increased over time.

Five-star universities

Educational experience

FEDERATION	92.3%
SUNSHINE COAST	89.2%
BOND	88.5%
CQUni	86.9%
QUEENSLAND	85.2%
GRIFFITH	84.9%
NEWCASTLE	83.8%

National average
78.2%

Graduate employment

CSU	97.4%
UNSW	90.4%
ANU	86.7%
SYDNEY	84.4%
CDU	84.3%
NEWCASTLE	84.2%
CANBERRA	84.1%
UTS	84.1%

National average
76%

Learner engagement

BOND	81.2%
ADELAIDE	62.9%
WOLLONGONG	62.9%
FLINDERS	62.1%
NOTRE DAME	60.8%
QUEENSLAND	60.6%
UNSW	59.8%

National average
49.7%

Learning resources

BOND	92.8%
FEDERATION	91.2%
QUEENSLAND	91.0%
SUNSHINE COAST	90.4%
DEAKIN	88.2%
MACQUARIE	87.4%
CQUni	87.1%
UNE	87.0%
ADELAIDE	86.6%
GRIFFITH	86.5%
NEWCASTLE	86.5%

National average
83.3%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide.*

Number of students

8,615
Undergraduate

24,534
Postgraduate

1,993
International undergraduate

What can I do?

- Legal publishing
- Legal advising
- Conveyancing
- Workplace advisery
- Administration
- Policy advisery

Graduate starting salary

$58,100
Undergraduate

$65,000
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

76%
Undergraduate

86.4%
Postgraduate

Five-star universities

Median starting salary

CSU	$80,600
UNSW	$66,900
UTS	$64,800
UWA	$64,300
SYDNEY	$64,100
CDU	$63,900
MACQUARIE	$62,800
ANU	$62,800

National average
$58,100

Skills development

FEDERATION	93.8%
BOND	90.9%
NEWCASTLE	89.1%
MACQUARIE	89.0%
QUEENSLAND	88.7%
WOLLONGONG	88.7%
ECU	88.5%

National average
83.9%

Student support

BOND	89.3%
SUNSHINE COAST	84.2%
FEDERATION	84.0%
SOUTHERN CROSS	81.9%
FLINDERS	81.3%
UNE	80.8%
CQUni	80.1%
UniSQ	80.0%
GRIFFITH	79.6%

National average
70.9%

Teaching quality

FEDERATION	96.5%
BOND	91.6%
SUNSHINE COAST	91.4%
QUEENSLAND	89.8%
WOLLONGONG	89.8%
MACQUARIE	86.7%
ADELAIDE	86.5%

National average
82.5%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Court Officer

Court officers assist in the effective operation of courts.

Court officers:

- announce the beginning and end of court sessions
- call on witnesses and administer the prescribed oath to jurors and witnesses
- administer the jury roster and post court lists on notice boards
- keep records of court processes served
- enforce court decisions by executing court orders, and serving legal orders and documents such as summonses or subpoenas
- maintain the orderly conduct of court and hearing rooms and adjacent areas
- attend to judges or magistrates, escorting them from chambers to the courtroom
- record and protect exhibits tendered in court and pass them to participants during the hearing
- maintain security, care and control of jury panels
- liaise with the judiciary, police department and legal professionals, and advise the public on legal procedures and practices
- run the court registries and maintain the court files
- open and close court and hearing room proceedings
- organise furniture for court and hearing rooms
- allocate rooms for use by legal practitioners
- prepare audiovisual equipment for court and hearing rooms
- escort prisoners to and from courtrooms
- summon potential jurors to court.

Court officers are required to liaise between the magistracy, legal practitioners and members of the public.

Specialisations

- Bailiff
- Clerk of Court
- Court Registrar
- Sheriff

Personal Requirements

- High level of maturity
- Good character
- Able to communicate with a range of people
- Aptitude for clerical duties
- Comfort in a legal environment
- Able to exercise a high level of responsibility

Education and Training

You can work as a court officer without formal qualifications. You will probably get some informal training on the job. The courts prefer you to gain your Senior Secondary Certificate of Education.

Entry to this occupation may be improved if you have qualifications and you may like to consider a VET course. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a court officer by studying justice, criminology or legal studies at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Most court officers work in the metropolitan area, although there are some positions in country areas. Court officers are employed by state, territory and federal governments in courts such as the Federal Court, Supreme Court, Family Law Courts, Magistrates Courts, and district and local courts, as well as some tribunals.

Experienced court officers may find opportunities for advancement in administration and management within the court systems, as well as in the state or territory and Australian public services. There are opportunities for temporary and casual work in this field.

See the Department of Justice website in your state or territory for further information.

Related Jobs

Debt Collector (p 55); Lawyer (p 196); Public Servant - State Government (p 163).

Law Clerk

Also known as Legal Executive and Paralegal

Law clerks perform a variety of legal tasks under the supervision of solicitors, barristers or clerks of court. Law clerks may assist their employers in all areas of law, including probating (proving the validity of wills), conveyancing (dealings in land and property), criminal law, family law, wills and power of attorney, insurance law, environmental law, human rights law, company law and civil litigation.

Law clerks:

- search land titles to check details such as property boundaries and ownership
- attend settlements for the purchase or sale of land
- examine contracts and obtain relevant information so that solicitors can proceed with finalisation
- fill out necessary forms and lodge them with government offices or the courts
- undertake company, business name, bankruptcy and other searches
- assist with maintenance of bookkeeping records
- assist with the preparation of briefing papers for use by barristers when a solicitor's client has to go to court
- assist clients by providing information about legal processes and statutory information
- assist prosecution or defence lawyers in court and arrange for the attendance of witnesses at court
- assist barristers and senior counsel with case management.

Personal Requirements

- Interested in the law
- Good knowledge of the English language
- Able to work accurately with attention to detail
- Able to think logically and clearly

Education and Training

You can work as a law clerk without formal qualifications. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you

should contact your chosen institution for further information.

You can also become a law clerk through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Law clerks are employed in a wide range of industries. They work for independent law firms, barristers, government departments and the legal departments of large organisations. Many law clerks begin their careers as legal secretaries or receptionists, learning about the law and legal language before taking on more responsibility.

Related Jobs

Conveyancer (p 286); Court Officer (p 195); Lawyer (p 196).

Lawyer

$1,646 | Very high skill | Stable

Lawyers provide advice, write documents and conduct negotiations on legal matters, and may represent clients in court and tribunal proceedings. They are described as solicitors or barristers, depending on the work they do.

Lawyers:

- interview clients to determine the nature of problems, and recommend and undertake appropriate legal action
- prepare cases for court by conducting investigations, undertaking research, arranging witness preparation and attendance, and giving notice of court actions
- represent clients in court
- manage conveyancing and other property matters by preparing contracts of sale, mortgage documents, lease documents and other documents relating to the transfer of land and buildings
- prepare and critically review contracts between parties
- prepare wills
- provide advice on family law, company law, partnerships, commercial law and trusts
- act as trustee or guardian
- act as executor of clients' wills.

The distinction between solicitors and barristers varies from state to state. In NSW, Victoria and Queensland, lawyers practise as either a solicitor or a barrister. In the ACT, the NT, SA, Tasmania and WA, the work of barristers and solicitors is usually combined, with many lawyers describing themselves as a 'barrister and solicitor'.

Specialisations

- Barrister
- Judge
- Magistrate
- Solicitor

Personal Requirements

- Good oral and written communication skills
- Able to understand, analyse and use facts quickly and logically
- Able to work under pressure and deal with a variety of people
- Integrity and good character

Education and Training

To become a lawyer you usually have to complete a degree in law at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Students are often advised to undertake a combined degree course that leads to two degrees. The prerequisite subjects required for entry into these combined courses depend on the non-law component of the combined course. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

To work as a lawyer in Australia you must obtain a Local Practising Certificate. To be granted a certificate, further study and an approved practical training course after completion of a law degree are required. On completion of the required academic and practical legal training you may apply to the Supreme Court for admission as a lawyer. To be eligible for admission you must satisfy the requirements of the legal board in your state or territory. Qualified legal practitioners may undertake further study to obtain a barrister's practicing certificate to become a barrister.

Employment Opportunities

Solicitors may work in private legal practices, either on their own or in a partnership. They may also work in state, territory or federal government departments, in community law centres or with business corporations.

Barristers are self-employed but normally practise in chambers with other barristers. Barristers may be promoted to Senior Counsel and eventually be appointed as a judge. Barristers and solicitors may also become magistrates.

Some lawyers do not remain within the profession, and move into administrative positions in commerce and industry or in the public service. With experience, it is possible to progress to positions such as magistrate or judge.

Related Jobs

Conveyancer (p 286); Court Officer (p 195); Valuer (p 66); Workplace Relations Officer (p 67).

Study Law

Study at Australia's leading clinical law school.

newcastle.edu.au/studylaw

THE UNIVERSITY OF NEWCASTLE AUSTRALIA

CRICOS Provider 00109J

Private Investigator

Also known as Private Detective and Private Eye

Private investigators conduct investigations for clients and prepare evidence for court proceedings. They are often involved with matters of insurance, missing persons and character enquiries. They may hold licences or perform the duties of a process server or private bailiff.

Private investigators:

- conduct surveillance and maintain records
- seek missing persons and locate witnesses
- take videos or photographs for use as evidence
- work undercover in organisations to gather specific information
- gather information for use in legal proceedings
- conduct asset and liability checks
- investigate the theft of private or commercial property
- provide advice about corporate and personal security
- investigate insurance or worker's compensation claims
- prepare reports of investigations
- take statements from witnesses.

Private investigators work indoors in offices and outdoors conducting surveillance. They may need to travel locally or interstate and often work outside of office hours.

Personal Requirements

- Good communication skills
- Good observation skills
- Able to work independently or as part of a team
- Able to accept responsibility
- Of sound character, with no criminal or other convictions that would prevent you from getting a private investigators licence

Education and Training

To become a private investigator you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a private investigator through a traineeship. Entry requirements may vary, but employers generally require Year 10.

In order to begin work, you need to apply for a licence from the relevant body in your state or territory. You may need to supply a National Police Check.

Additional Information

People engaged in security work must be appropriately licensed. For more information, refer to the separate entry for Security Officer. A drivers licence is usually required.

Employment Opportunities

Most private investigators are self-employed or work in a small team with other agents. Many private investigators enter the occupation after working in the police or defence forces and work in private agencies and commercial and industrial organisations. Work is mainly generated by the investigation of suspected insurance fraud and location of missing persons.

Related Jobs

Debt Collector (p 55); Police Officer - Australian Federal Police (p 160); Police Officer - State (p 161); Security Officer (p 318).

Medicine

Are you comfortable being around people who are sick and injured or do you go pale at the sight of blood? Do you care about health and wellbeing and are you good with people? These questions matter, because studying medicine leads to becoming a doctor. You'll sacrifice long hours and a huge workload for a very good wage and often rewarding work, and a variety of specialisation options are available.

Courses and specialisations

Some of the newer medicine courses are focused on rural or community-based practice to encourage graduates to work in areas where doctors are in short supply, and many programs offer placements in country areas. An increasing number of courses are designed for graduates. It may be worthwhile completing your first degree in a different health-related area before going on to one of the four-year graduate courses in medicine.

Entry requirements to graduate programs includes performance in the Graduate Australian Medical School Admissions Test (GAMSAT), an interview and the results of your undergraduate degree.

Where to study

If you have completed your prerequisite subjects in Year 12 and achieved a sufficient ATAR, you could be eligible for an undergraduate medicine degree. However, this is a very competitive pathway as it's offered only to a limited number of students. You will also likely be required to sit the University Clinical Aptitude Test (UCAT) as part of the admissions process.

Alternatively, you can get into a medicine postgraduate after completing a bachelor degree of your choice — some universities accept students from a range of undergraduate backgrounds. You will be required to submit your GAMSAT results upon applying for entry into the medicine postgraduate. This test is offered twice a year — in March and September — and you can do it in the penultimate or final year of your bachelor degree.

Five-star universities

Educational experience

TASMANIA	90.8%
UNE	86.0%
JCU	85.3%

National average
75.9%

Graduate employment

ADELAIDE	100.0%
UNE	100.0%
UNSW	100.0%
WESTERN SYDNEY	100.0%

National average
90%

Learner engagement

BOND	87.0%
UNE	86.0%
JCU	83.6%

National average
71.7%

Learning resources

WOLLONGONG	92.3%
UNE	91.7%

National average
77.6%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide.*

Number of students

3,606
Undergraduate

17,604
Postgraduate

1,193
International undergraduate

What can I do?

- Emergency medicine
- General practice
- Medical administration
- Radiology
- Paediatrics
- Medical research

Graduate starting salary

$84,000
Undergraduate

$87,700
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

90%
Undergraduate

97.4%
Postgraduate

Five-star universities

Median starting salary

UWA	$96,900
ADELAIDE	$93,300
TASMANIA	$87,700

National average
$84,000

Skills development

ADELAIDE	95.0%
TASMANIA	94.8%

National average
87.6%

Student support

TASMANIA	90.8%
BOND	87.2%
FLINDERS	86.7%

National average
75%

Teaching quality

TASMANIA	92.2%
UNE	89.8%

National average
78.2%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Meet a medicine student

Paige Samuel

Studying Bachelor of Biomedicine at the University of Melbourne

For Paige – who was quite undecided about her career path when she graduated high school – it was the flexibility and structure of the Melbourne curriculum that drew her to studying at the University of Melbourne.

'I remember thinking this was one of the biggest decisions I'd ever had to make. I was freaking out. I was 18, how was I supposed to know what I want to do with the rest of my life? Melbourne allowed me leeway when I wasn't 100 per cent sure what I wanted to do in the future.

Breadth subjects give you the freedom to expand your degree and explore something different. I've studied languages. I've done some sports coaching. I'm going to be taking a winter subject this year on painting techniques with the Victorian College of the Arts, at the University's Southbank campus.'

Helping you to realise your potential

Access Melbourne considers more than just your ATAR when you apply for undergraduate study. Based on your circumstances, you could receive financial support and a guaranteed place in your preferred course.

Check your eligibility at **access.unimelb.edu.au**

POSTERA CRESCAM LAUDE
THE UNIVERSITY OF MELBOURNE

Chinese Medicine Practitioner

Very high skill Strong

Chinese medicine practitioners treat disorders and illnesses through the application of traditional Chinese medicine practices such as Chinese herbal medicine, acupuncture and tui na (remedial massage).

Chinese medicine practitioners:

- diagnose health problems through discussions with the patient, checking the patient's pulse and tongue, and observing abnormalities in sleep, appetite, perspiration and body temperature
- formulate traditional Chinese medicine treatment plans based on the patient's diagnosis
- prescribe medicinal substances derived from roots, flowers, seeds and leaves in the form of teas, capsules, tinctures or powders
- advise on dietary and lifestyle choices
- apply other therapies such as acupuncture, cupping (applying a heated cup to the skin to create suction), tui na, and exercise and breathing therapy.

Specialisations

- Acupuncturist

Personal Requirements

- Good communication skills
- Good analytical skills
- Patient, tactful and compassionate
- Interest in health and well-being

Education and Training

To become a Chinese medicine practitioner you usually have to complete a degree in health science with a major in Chinese medicine. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, biology, chemistry, and earth and environmental science are normally required. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information. To work as a Chinese medicine practitioner, you must be registered with the Chinese Medicine Board of Australia. In order to gain registration, you must fulfil a variety of registration standards. Contact the board for more information.

Employment Opportunities

Most Chinese medicine practitioners work in private practice, but some join other healthcare professionals in multidisciplinary centres. Some may also work in research or operate as consultants. Employment opportunities depend on the level of community awareness and acceptance of alternative healthcare practices.

Related Jobs

Chiropractor (p 224); Massage Therapist (p 175).

Dermatologist

Dermatologists specialise in the treatment of skin diseases such as eczema, acne, skin infections and psoriasis, using techniques such as ultraviolet light therapy, photodynamic therapy and laser treatment. Dermatologists also detect and treat skin cancers.

A dermatologist:

- perform skin examinations
- inform patients about the need for annual screenings, sun protection, skin cancer awareness and skin-based self-examinations
- document the medical history of patients
- diagnose and treat a range of skin conditions, including acne, skin cancer and athlete's foot
- examine the patient to determine the nature of the disorder or illness and record the patient's medical information
- order, perform and analyse laboratory tests and other diagnostic images and procedures
- provide overall care for patients and prescribe and administer treatments, medications and other remedial measures
- aid in the prevention of diseases and conditions
- advise patients on diet, exercise, hygiene and general health
- prescribe and administer medication and inoculate patients to prevent infectious or contagious diseases
- report births, deaths and notifiable diseases to government authorities
- arrange for patients to be admitted to hospital
- refer patients to other medical specialists and exchange relevant medical details.

Dermatologists are involved in a wide range of activities, including consulting patients, attending emergencies, performing operations and arranging medical investigations. When caring for patients, dermatologists work with many other health professionals. They may also participate in and undertake research.

Dermatologists sometimes have to deal with unpleasant conditions due to a patient's illness or injury. Adopting strict hygiene practices is important. Depending on their place of work, dermatologists may have to work long, demanding and irregular hours.

Personal Requirements

- Good communication skills
- Able to exercise high ethical standards
- Compassionate towards others
- A high degree of motivation and self-discipline

Education and Training

A dermatologist is a medical specialist which requires further study after completing a medical degree.

To become a medical practitioner you usually have to study medicine at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with particularly good results. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Some universities offer medicine as a double degree and may have additional prerequisites. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Entry into these courses is highly competitive and is based on a combination of academic achievement, performance on the

University Clinical Aptitude Test for Australia and New Zealand (UCAT ANZ) and a structured interview. The UCAT is a written test that assesses non-academic personal qualities. Alternatively, you can become a medical practitioner by completing a relevant bachelor degree, followed by a postgraduate qualification in medicine. Entry into the graduate-entry courses is based on prior completion of a bachelor degree, performance in the Graduate Australian Medical School Admissions Test (GAMSAT) and a score resulting from a semi-structured interview. Studies in behavioural, social, biological and physical sciences, and humanities are likely to enhance performance in the test, and are offered at most universities.

After obtaining a medical degree, you will need to complete an internship and a residency, each for a minimum of a year. From there, an additional four years of vocational training is required to complete a Fellowship at the Australian College of Dermatologists.

Employment Opportunities

Dermatologists usually work in private practice and/or attend clinics at hospitals and institutions. A small number have full-time positions in hospitals. Dermatologists are not often called upon to attend emergencies and generally do not have on-call responsibilities. There is a high level of patient contact and in many cases long-term ongoing care for patients with chronic skin conditions.

Opportunities for medical graduates in general depend on a variety of factors, including birth and death rates, population levels and movements, changing patterns of illness and injury, technological advances in health care, the trend towards preventative medicine and the cost of treatment and health insurance to the patient. While most city areas and major towns are well supplied with medical practitioners, there are shortages in some fields.

Embryologist

Embryologists perform routine diagnostic services and embryological procedures, such as in vitro fertilisation (IVF), at hospitals and clinics.

Embryologists:

- determine fertility levels of individuals
- collect eggs and sperm from patients for processing
- test the suitability of sperm for use
- preserve sperm and embryos for future use
- monitor embryo development
- select embryos for transfer
- communicate with patients about specific treatment options
- research infertility solutions with other medical, nursing and counselling staff
- use assisted reproductive technologies (ART) for help with infertility
- monitor and maintain the sperm bank
- ensure regular maintenance of equipment.

Embryologists are often required to work irregular hours, including early mornings, evenings, weekends and public holidays.

Personal Requirements

- Good communication skills
- Self-confidence
- Able to relate to people
- Compassionate towards others
- Enjoy working with people
- Able to carry out detailed and accurate work
- Good problem-solving skills

Education and Training

To become an embryologist, you usually have to study biological science at university, followed by a postgraduate qualification in a relevant field. To get into the degree courses you usually need a Year 12 qualification. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, earth and environmental science, biology, chemistry and physics are normally required. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements or offer external study.

Additional Information

Students and graduates may be eligible for membership with the Fertility Society of Australia (FSA) and with the Scientists in Reproductive Technologies (SIRT) sub-group. SIRT is a special interest group representing the scientific membership of FSA. They promote the education and training of scientists working in reproductive technologies. Visit the FSA and SIRT websites for more information

Employment Opportunities

Entry into this occupation is competitive. Once you are employed you will receive on-the-job training in protocols. There are fertility clinics located nationwide in capital cities and larger regional centres.

Medical Practitioner

Also known as GP and Doctor

Medical practitioners diagnose physical and mental illnesses, disorders and injuries, and prescribe medications and treatment to promote or restore good health.

Medical practitioners:

- examine the patient to determine the nature of the disorder or illness and record the patient's medical information
- order, perform and analyse laboratory tests, X-rays and other diagnostic images and procedures
- provide overall care for patients, and prescribe and administer treatments, medications and other remedial measures
- aid in the prevention of diseases and disorders by advising patients on diet, exercise, hygiene and general health
- prescribe and administer medication and inoculate patients to prevent infectious or contagious diseases
- provide pre-natal and post-natal care
- report births, deaths and notifiable diseases to government authorities
- arrange for patients to be admitted to hospital
- refer patients to other medical specialists and exchange relevant medical details.

Medical practitioners are involved in a wide range of activities, including consultations, attending emergencies, performing operations and arranging medical investigations. When caring for patients, medical practitioners work with many other health professionals. They may also participate in and undertake research.

Medical practitioners sometimes have to deal with unpleasant conditions due to a patient's illness or injury. Adopting strict hygiene practices is important.

Depending on their area of specialisation, medical practitioners may have to work long, demanding and irregular hours. This may include working on weekends and at night or being on call 24 hours a day.

Specialisations

- Addiction Medicine Practitioner
- Anaesthetist
- Emergency Medicine Practitioner
- General Practitioner
- Intensive Care Medicine Practitioner
- Medical Administrator
- Occupational and Environmental Medicine Practitioner
- Ophthalmologist
- Paediatrician and Child Health Practitioner
- Pain Medicine Practitioner
- Palliative Medicine Practitioner
- Pathologist
- Physician
- Psychiatrist
- Public Health Medicine Practitioner
- Radiation Oncologist
- Radiologist
- Rehabilitation Medicine Practitioner
- Sexual Health Medicine Practitioner
- Sport and Exercise Medicine Physician

Personal Requirements

- Good communication skills
- Self-confidence
- Able to exercise high ethical standards
- Able to relate to people
- Compassionate towards others
- Enjoy working with people
- Able to cope with the physical demands of the job
- A high degree of motivation and self-discipline

Education and Training

To become a medical practitioner you usually have to study medicine at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with particularly good results. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Some universities offer medicine as a double degree and may have additional prerequisites. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Entry into these courses is highly competitive and is based on a combination of academic achievement, performance on the University Clinical Aptitude Test for Australia and New Zealand (UCAT ANZ) and a structured interview. The UCAT is a written test that assesses non-academic personal qualities.

Alternatively, you can become a medical practitioner by completing a relevant bachelor degree, followed by a postgraduate qualification in medicine. Entry into the graduate-entry courses is based on prior completion of a bachelor degree, performance in the Graduate Australian Medical School Admissions Test (GAMSAT) and a score resulting from a semi-structured interview. Studies in behavioural, social, biological and physical sciences, and humanities are likely to enhance performance in the test, and are offered at most universities.

Additional Information

Following completion of the above courses, graduates must undertake one year of full-time employment (internship) at a recognised teaching hospital to be able to gain full registration as a medical practitioner with the Medical Board of Australia. Prior to commencing clinical placements, students will be required to undergo a National Police Check and a Working with Children Check, and provide a schedule of immunisations.

It is a legal requirement for graduates to be registered with the Medical Board of Australia before being able to practise as a medical practitioner in any state or territory in Australia. For full details, visit their website.

Entry to the various specialisations requires postgraduate study, experience in approved hospitals and the passing of examinations leading to membership of the appropriate professional college. Specialist training programs and examinations are administered by these colleges.

Training standards for general practitioners are set by the Royal Australian College of General Practitioners. To become a general practitioner, you must become a fellow of the college. To become a fellow, you must complete an additional three years of general practice training following the intern year and pass an exam. Rural practice incorporates a further year of special rural skills training.

Employment Opportunities

Medical practitioners may work in private practice on their own, in partnership with another medical practitioner, in a group practice, in community health centres and in public hospitals. They work in cities, suburbs and rural towns. Medical practitioners can also be employed as a Navy Doctor with the Australian Defence Force, working both on and off-shore to provide medical care to personnel.

Opportunities for medical graduates depend on a variety of factors, including birth and death rates, population levels and movements, changing patterns of illness and injury, technological advances in health care, the trend towards preventative medicine, and the cost of treatment and health insurance to the patient. While most city areas and major towns are well supplied with medical practitioners, there are shortages in some city areas and in rural and remote locations.

Related Jobs

Chiropractor (p 224); Dermatologist (p 201); Forensic Scientist (p 237); Hospital Administrator (p 175); Medical Scientist (p 203); Midwife (p 177); Nurse - Registered (p 212); Obstetrician and Gynaecologist (p 204); Paramedic (p 205); Pharmacologist (p 216); Surgeon (p 206); Toxicologist (p 207).

Medical Scientist

Medical scientists conduct medical laboratory tests to provide information for diagnosing, treating and preventing disease. A medical scientist may specialise in haematology, immunology, transfusion science, clinical biochemistry, microbiology, histopathology, cytology, molecular genetics or virology.

Medical scientists:

- study blood and its diseases, count blood cells and examine blood slides with a microscope
- identify blood diseases such as anaemia and leukaemia
- determine the suitability of blood for transfusion by cross-matching the blood with the patient and checking for the presence of diseases such as hepatitis and AIDS

- test blood for blood group antibodies that may cause disease in newborn babies and check the compatibility of bone marrow, kidney and other organs for transplantation
- determine the chemical composition of specimens such as blood and urine, which are important in the diagnosis and treatment of kidney disease, liver disease and diabetes
- grow disease-causing organisms such as bacteria, viruses and fungi that are taken from a variety of clinical specimens
- prepare body tissues (taken from the body during surgery or post-mortem examinations) for microscopic examination
- prepare body fluids for microscopic examination and diagnose abnormalities
- isolate and examine genetic material (DNA and RNA) for alterations specific to genetic diseases and cancer, to assist with the diagnosis and treatment of these conditions
- supervise the work of other scientists, technical officers and assistants
- advise medical practitioners on the interpretation of tests.

They work as part of a team with doctors, pathologists, scientists, technicians and laboratory assistants.

Personal Requirements

- Able to make clear and precise observations
- Able to work accurately with attention to detail
- Good verbal and written communication skills
- Able to identify and analyse problems and develop practical solutions
- Able to perform under pressure
- Able to organise and prioritise work

Education and Training

To become a medical scientist you usually have to study medical or biomedical science at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Most medical scientists work in the health industry, especially in hospitals. There are also employment opportunities in universities and research organisations and in the private sector. There is a relatively stable employment base.

Factors that may affect employment include the number and type of tests required to research, diagnose and treat diseases, and the incidence of new diseases.

Related Jobs

Exercise Scientist (p 173); Medical Laboratory Technician (p 177); Operating Theatre Technician (p 179); Pharmacologist (p 216); Toxicologist (p 207).

Obstetrician and Gynaecologist

Obstetricians and gynaecologists provide medical care before, during and after childbirth. Gynaecologists also diagnose, treat and assist in the prevention of disorders of the female reproductive system.

Obstetricians and gynaecologists:

- examine patients to determine their disorder, illnesses or injuries
- order and analyse laboratory tests, X-rays and diagnostic images and procedures
- provide care for patients and prescribe and administer medication, treatments and remedial measures
- provide pre-natal and post-natal care
- follow best-practice guidelines and remain up-to-date with the latest research and technology.

Obstetricians and gynaecologists may have to work irregular shifts, with long, demanding hours. This may include working on weekends and at night, as well as being on call 24 hours a day.

Personal Requirements

- Good communication skills
- Self-confidence
- Able to adhere to high ethical standards
- Able to relate to people
- Compassionate towards others
- Enjoy working with people
- Able to cope with the physical demands of the job
- A high level of motivation and self-discipline

Education and Training

To become an obstetrician or gynaecologist, you have to study medicine at university. To get into these courses, you usually need to gain your Senior Secondary Certificate of Education with particularly good results. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Some universities offer medicine as a double degree and may have additional prerequisites. Universities have different prerequisites and some have flexible entry requirements. Contact the institute you are interested in for more information.

Additional Information

Following completion of the above courses, graduates must undertake one year of full-time employment (internship) at a recognised teaching hospital to be able to gain full registration as an obstetrician or gynaecologist with the Medical Board of Australia. Prior to commencing clinical placements, students will be required to undergo a National Police Check and a Working with Children Check, and provide evidence of immunisations.

It is a legal requirement that graduates be registered with the Medical Board of Australia before practicing in any state or territory in Australia. For full details, visit their website.

Employment Opportunities

Obstetricians and gynaecologists work in a range of hospital settings. They may work in a public hospital or a private practice. They work in cities, suburbs and rural towns.

Opportunities for graduates depend on a variety of factors, including birth and death rates, population levels and movements, changing patterns of illness and injury, technological advances in health care, the trend towards preventative medicine, and the cost of treatment and health insurance to the patient.

Orthoptist

Very high skill

Strong

Orthoptists detect, diagnose and treat disorders of the eye and associated eye movement and vision problems.

Orthoptists:

- measure and assess vision and prescribe glasses when appropriate
- investigate, monitor and assist with treating eye disorders such as glaucoma, cataracts, diabetic eye disease and age-related macular degeneration

- measure and select intraocular (within the eye) lenses for cataract surgery
- detect and manage eye movement disorders, such as strabismus (turned eye) and amblyopia (lazy eye), and their sensory consequences
- conduct specialised diagnostic and imaging techniques, such as ultrasonography and topography, to determine the effects and progression of eye disease
- assess and provide management strategies for people with neurological disorders
- devise strategies for rehabilitating impaired vision and design therapy programmes to maximise an individual's remaining vision
- provide reports on the existence of eye defects to practitioners, therapists and relevant authorities, such as transport authorities
- provide educational information to patients, families and members of the community about eye conditions and their effects
- assist the community by providing vision screening tests and promoting preventative eye health care.

Orthoptists often work with ophthalmologists, medical practitioners and other allied health professionals.

Orthoptists may specialise in:

- ophthalmic eye care, which involves treatment of general eye diseases such as glaucoma, cataracts, diabetic eye disease and age-related macular degeneration
- neuro-ophthalmology, which involves the treatment of neurologically based eye disorders caused by stroke and head injury
- eye movement disorders and paediatric eye care, which involves the treatment of conditions such as strabismus, amblyopia and double vision
- vision rehabilitation, which involves maximising remaining sight in people with low vision using rehabilitation strategies and magnification aids
- education or research.

Personal Requirements

- Interested in people's health needs
- Enjoy health sciences
- Good communication skills

Education and Training

To become an orthoptist, you usually have to complete a degree in vision science, health science or biological science at university, followed by a postgraduate qualification in orthoptics. To get into the degree courses you usually need to gain your VCE. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate, immunisations and a Working with Children Check.

Contact the institutions you are interested in for more information.

Employment Opportunities

Orthoptists are employed in a wide range of settings, including private practices, specialist eye clinics, public hospitals (including children's hospitals), vision impairment agencies and research centres. Both part-time and full-time employment is available.

Paramedic

Paramedics provide pre-hospital emergency care, treatment and specialised transport for patients.

Paramedics:

- drive ambulances to sites of medical emergencies and accidents that may require the administration of advanced life support
- lift and place patients on stretchers, load the stretchers into ambulances and transport patients to hospital
- assess and treat patients at the site and on the way to hospital
- administer pain-relieving drugs and replace fluids
- prepare patient care records and other written reports on the state of patients' injuries and the treatment provided
- be present at public gatherings, such as large sporting events, where accidents or other health emergencies may occur
- provide routine transport for patients between home and hospital (for patients requiring further treatment or specialised treatment such as occupational therapy and chemotherapy, for example)
- perform daily vehicle and equipment checks, making sure that medical supplies (including drugs) are accounted for and that equipment and ambulances are in good working order.

Paramedics work in teams and in shifts, and in all kinds of weather conditions. They are required to assist at a range of incidents, including motor vehicle accidents and medical emergencies inside and outside domestic premises, building sites and public areas. They may work in confined spaces, such as under vehicles and buildings, and at sites of hazardous material accidents, such as fires and chemical spills. They work closely with members of other emergency services such as firefighters, police and the State Emergency Service (SES).

Personal Requirements

- Able to remain calm and control emotions in stressful situations
- Able to think clearly and act quickly
- Have a caring and compassionate nature
- Good level of health and fitness
- Good analytical and problem-solving skills
- Able to work alone and as part of a team
- Able to follow instructions and guidelines
- Good communication and interpersonal skills
- Clear decision-making skills and good judgement
- Caring, tolerant and non-judgmental attitude
- Enjoy working with people from diverse backgrounds
- Committed to developing and maintaining skills

Education and Training

To become a paramedic you usually need to complete a degree in paramedic science or paramedic practice at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking the clinical placements required by the

courses, students will need to obtain a National Police Certificate and a Working with Children Check, and undergo medical and physical capacity checks. Contact the universities you are interested in for full details.

Employment Opportunities

Paramedics can be based in metropolitan areas or in rural locations. Competition for available places is very strong.

Related Jobs

Anaesthetic Technician (p 168); Lifeguard (p 267); Medical Practitioner (p 202); Midwife (p 177); Nurse - Enrolled (p 212); Radio Dispatcher (p 314).

Prosthetist/Orthotist

Prosthetists/Orthotists assess the physical and functional limitations of people resulting from illness and disabilities, and provide prostheses (artificial limbs) and orthoses (supportive devices) to restore function or compensate for muscular and skeletal disabilities, including limb amputation.

Prosthetists/orthotists:

- assess and establish clients' needs through physical examinations and standardised tests
- assess clients' functional abilities in home, work, educational and leisure environments and recommend appropriate prosthetic/orthotic devices
- design, prescribe and fit prosthetic/orthotic devices to meet clients' needs
- provide advice to other healthcare professionals regarding patients' problems, needs, progress and any pre-surgical planning
- provide gait (walking) training and education relating to the use of prosthetic/orthotic devices
- test and adjust the prostheses or orthoses for effectiveness and client comfort
- record and report on client progress
- supervise support personnel.

Prosthetists/orthotists may work with prosthetic/orthotic technicians and other health professionals.

Personal Requirements

- Aptitude for technical tasks
- Good communication skills
- Enjoy helping people
- Able to work as part of a team

Education and Training

To become a prosthetist/orthotist, you usually have to complete a degree at university with a major in anatomy and physiology, followed by a postgraduate qualification in prosthetics and orthotics.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry, biology and physics are normally required. Entry to the postgraduate course usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Prosthetists/orthotists work within major teaching hospitals, rehabilitation centres and private practice. They may also work for commercial companies that design and manufacture devices for people with disability.

Related Jobs

Biomedical Engineer (p 233); Occupational Therapist (p 225); Physiotherapist (p 227); Podiatrist (p 227).

Surgeon

Also known as Doctor and Medical Practitiioner

Surgeons treat diseases, injuries and deformities by using a range of different methods and instruments, and may specialise in a particular field, such as cardiovascular or plastic surgery.

Surgeons:

- operate on patients to repair injuries, fix deformities, treat disease and improve function
- examine patients to determine medical state and surgical risk
- prescribe pre-operative and post-operative treatments to patients including sedatives and antibiotics
- analyse patient medical history, allergies and examination results to decide best courses of action
- refer patients to other medical specialists and exchange relevant medical details

Surgeons can work in private practice alone or with fellow medical practitioners, in a group practice, in community health centres or at a public hospital. They work in cities, suburbs and rural towns.

Specialisations

- Brain Surgeon
- Cardiovascular Surgeon
- Orthopaedic Surgeon
- Plastic Surgeon

Personal Requirements

- Good communication skills
- Ability to exercise high ethical standards
- Compassionate towards others
- High level of motivation and self-discipline
- Excellent hand-eye coordination

Education and Training

To become a surgeon, you have to study medicine at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with particularly good results. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Some universities offer medicine as a double degree and may have additional prerequisites. Universities have different prerequisites and some have flexible entry requirements. Contact the institute you are interested in for more information.

A surgeon is a specialisation of medicine and requires postgraduate study, experience in approved hospitals and the passing of examinations leading to membership of the appropriate professional college. Specialist training programs and examinations are administered by these colleges. Entry into these courses is highly competitive and is based on a combination of academic achievement, performance on the University Clinical Aptitude Test for Australia and New Zealand (UCAT ANZ) and a structured interview. The UCAT is a written test that assesses non-academic personal qualities.

Alternatively, you can become a surgeon by completing a relevant bachelor degree followed by a postgraduate qualification in

medicine. Entry into the graduate-entry courses is based on prior completion of a bachelor degree, performance in the Graduate Australian Medical School Admissions Test (GAMSAT) and a score resulting from a semi-structured interview. Studies in behavioural, social, biological and physical sciences, and humanities are likely to enhance performance in the test, and are offered at most universities.

Additional Information

Following completion of the above courses, graduates must undertake one year of full-time employment (internship) at a recognised teaching hospital to be able to gain full registration as a surgeon with the Medical Board of Australia. Prior to commencing clinical placements, students will be required to undergo a National Police Check and a Working with Children Check, and provide evidence of immunisations.

It is a legal requirement that graduates to be registered with the Medical Board of Australia before practicing in any state or territory in Australia.

Employment Opportunities

Opportunities for surgery graduates is dependent on a number of factors including population levels, birth and death rates, advances in medical technology and patterns of illness. Graduates may have to work in rural and remote areas, where there can be a shortage of surgeons.

Toxicologist

Toxicologists study the harmful effects of chemical, physical and biological agents on living organisms by detecting and examining the symptoms, mechanisms and treatments of poisoning (especially the poisoning of people). They also determine safe or acceptable levels of exposure to particular agents.

Toxicologists:

- study the amount of exposure to a substance (from pollution caused by environmental contaminants such as industrial waste products or emergency events such as a gas leak, for example) and the potential effect it may have on public health, plants, animals and the ecosystem
- study how exposure to foreign chemicals affects the genetic, chemical, physical and structural composition of cells, tissues, organ systems and whole organisms
- devise and carry out experiments to determine how chemical or drug concentrations in the body change over time
- test newly discovered or manufactured substances for their safety, effects and possible use as drugs
- analyse blood, urine and other biological and environmental samples to identify the chemical composition and concentration of drugs, contaminants and other substances
- evaluate evidence from cases where tampering and contamination has occurred
- write scientific reports on research and investigations, as well as more general information for scientific, managerial, political and general audiences
- document results, preserve evidence and maintain chain of custody (the document or paper trail showing the process from evidence seizure through to the presentation of the evidence in court) in criminal investigations
- provide advice to managers, politicians, primary producers, healthcare workers, the general public and community groups.

Personal Requirements

- Enjoy and have an aptitude for science and research
- Able to think logically and analytically
- Able to carry out detailed and accurate work
- Good communication skills
- Able to think creatively and solve problems
- Able to work as part of a team

Education and Training

To become a toxicologist you usually have to complete a relevant science or forensics degree at university with a major in toxicology. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry, biology and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Students and graduates of relevant courses may be eligible for membership of the Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists.

Employment Opportunities

Toxicologists are employed across several industries, including pharmaceutical, food and chemical industries, environmental management, scientific research, government regulatory agencies, and other research organisations and health services. They are also employed in hospitals and educational institutions.

Related Jobs

Chemist (p 235); Environmental Scientist (p 31); Forensic Scientist (p 237); Marine Biologist (p 241); Pharmacist (p 216); Tissue Culture Technician (p 246); Veterinarian (p 337); Zoologist (p 338).

Nursing

Nurses work closely with different health professionals, patients and their families, and are well known for their compassion and communication skills. As a nurse, you will encounter people during the most difficult times of their lives and others during their most exciting times. This makes for a rewarding and versatile career.

Courses and specialisations

Many people think of nurses as working exclusively in clinical practice and in hospitals, looking after the sick or injured. However, many nurses work in community education, factories, offices, schools, pharmaceutical companies, administration or in nurse education. There are also specialisations within clinical practice, such as emergency, aged care, midwifery or intensive care.

Although some degrees will let you specialise in a particular area, you may need to train and work in a range of areas first and complete additional study after graduation to work in the area you want to specialise in.

Where to study

Nursing is a relatively easy field to get into — there are many courses available that vary widely in length, with several modes of study offered.

Some courses are likely to be better than others, so look carefully at the course information and try to get detailed course outlines. Pay attention to the amount and kind of practical experience on offer in each course and try to visit the campus to talk with students and staff about courses of interest.

Some states have traineeships and VET courses for those wanting to enter the occupation at the enrolled or division two level, rather than the registered graduate nurse level. You can then work your way up the qualifications and career ladder. Note that this guide only includes degree-level courses.

Five-star universities

Educational experience

AVONDALE	90.4%
SWINBURNE	79.1%
ADELAIDE	78.5%
ECU	77.6%
GRIFFITH	74.9%
MURDOCH	73.9%

National average
69%

Graduate employment

CSU	90.2%
SYDNEY	88.4%
SOUTHERN CROSS	88.3%
DEAKIN	88.0%
AVONDALE	87.9%
MONASH	87.4%
UNE	86.6%

National average
76.4%

Learner engagement

AVONDALE	76.6%
SWINBURNE	67.8%
MONASH	63.8%
MURDOCH	63.4%
FLINDERS	62.8%
ADELAIDE	62.4%
DEAKIN	59.4%
SYDNEY	59.2%
WOLLONGONG	59.2%

National average
49.6%

Learning resources

AVONDALE	92.0%
ECU	89.6%
SYDNEY	88.9%
DEAKIN	88.7%
MURDOCH	85.8%
SUNSHINE COAST	85.3%
GRIFFITH	84.6%

National average
80.7%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

5,746
Undergraduate

22,497
Postgraduate

11,989
International undergraduate

What can I do?

Registered nursing
Education
Forensics
Aged care
Community centre care
Research

Graduate starting salary

$62,100
Undergraduate

$78,600
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

76.4%
Undergraduate

92.6%
Postgraduate

Five-star universities

Median starting salary

CSU	$68,200
JCU	$67,900
CANBERRA	$67,400
QUEENSLAND	$67,200
QUT	$67,000
UNE	$66,300
SOUTHERN CROSS	$66,200

National average
$62,100

Skills development

AVONDALE	94.1%
SYDNEY	90.7%
ECU	89.5%
NOTRE DAME	88.5%
DEAKIN	87.8%
MURDOCH	86.3%
GRIFFITH	86.0%
WOLLONGONG	86.0%
ADELAIDE	85.9%

National average
81.8%

Student support

AVONDALE	92.2%
ECU	80.5%
DEAKIN	80.3%
GRIFFITH	77.7%
MONASH	76.5%
SOUTHERN CROSS	74.6%
ACU	73.8%
SUNSHINE COAST	73.6%
WOLLONGONG	73.6%

National average
71.1%

Teaching quality

AVONDALE	91.3%
DEAKIN	84.1%
ECU	82.1%
SWINBURNE	80.8%
SYDNEY	80.8%
ADELAIDE	79.9%
NOTRE DAME	79.8%
GRIFFITH	79.6%

National average
74.1%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Aged Care Nurse

Aged care nurses play a vital role in providing comprehensive and specialised care for elderly individuals. With a focus on promoting health, well-being and quality of life, they contribute to the overall support and comfort of aged care residents.

Aged care nurses:

- assess and monitor the health and well-being of elderly residents
- develop and implement care plans tailored to individual needs
- administer medications and treatments as prescribed
- assist with activities of daily living, including bathing, dressing and feeding
- collaborate with healthcare professionals and support staff to provide holistic care
- educate residents and their families on health management and disease prevention.

Aged care nurses work in various settings, including residential aged care facilities, nursing homes and community care centres. Shift work is common, including weekends, evenings and public holidays. They would balance the physical demands of the job with empathy and compassion.

Specialisations

- Dementia care
- Palliative care
- Rehabilitation care
- Community aged care
- Management and leadership

Personal requirements:

- Compassion and empathy towards the elderly population
- Patience and understanding to address the unique needs and challenges of ageing individuals
- Good communication and interpersonal skills to interact effectively with residents and their families
- Physical and emotional resilience to cope with the demands of the profession
- Attention to detail and strong observational skills to monitor changes in residents' health
- Ability to work as part of a multidisciplinary team

Education and training:

To become an aged care nurse, you'd have completed a bachelor degree in nursing or a diploma in nursing and be registered with the Australian Health Practitioner Regulation Agency (AHPRA) as a registered nurse. You might have additional certifications or courses in aged care nursing or gerontology.

Employment opportunities

Aged care nurses have excellent employment opportunities in Australia. There is an increasing demand for aged care services due to the ageing population. Employment opportunities are available in residential aged care facilities, nursing homes, hospitals and community care centres, with potential for career progression into leadership and management roles.

Mental Health Nurse

Mental health nurses play a vital role in providing compassionate care, support and treatment to individuals with mental health conditions. They assess patients, develop personalised care plans, administer medications and collaborate with a multidisciplinary team to promote mental wellbeing and improve quality of life. Mental health nurses have diverse responsibilities aimed at supporting and promoting the mental well-being of individuals.

Mental health nurses:

- assess and evaluate patients' mental health conditions and needs
- develop and implement individualised care plans
- provide counselling and therapy to patients
- administer medications and monitor their effectiveness
- collaborate with psychiatrists, psychologists and other healthcare professionals in the treatment and management of mental health conditions
- educate patients and their families on mental health issues and self-care strategies
- assist patients with daily activities and promoting self-care
- maintain accurate and up-to-date patient records.

Mental health nurses typically work in a variety of settings, including hospitals, community health centres and psychiatric facilities. Key aspects of their working conditions include shift work, including evenings, weekends and public holidays. Mental health nurses would be exposed to emotionally challenging situations and working with individuals experiencing distress. They will be collaborating with a multidisciplinary team, including psychiatrists, psychologists, social workers and occupational therapists, while adhering to strict patient confidentiality and ethical standards.

Specialisations

- Child and adolescent mental health
- Forensic mental health
- Dual diagnosis
- Geriatric mental health
- Crisis and emergency mental health

Personal requirements

- Empathy and compassion to provide support and care to individuals with mental health conditions
- Excellent communication and interpersonal skills to establish rapport with patients
- Emotional resilience to cope with challenging and emotionally demanding situations
- Strong observational and assessment skills to identify changes in patients' mental health
- Good problem-solving and critical thinking abilities
- Ability to work as part of a multidisciplinary team

Education and training

To become a mental health nurse, you'd typically have a bachelor degree in nursing, specialising in mental health. You'd also be registered with the Australian Health Practitioner Regulation Agency (AHPRA) as a registered nurse.

Employment opportunities

Mental health nurses have excellent employment opportunities in Australia. They can be found in public and private healthcare settings, including hospitals, community health centres and residential care facilities. There's also potential to work in diverse

settings, such as rural and remote areas, Indigenous communities and specialised mental health services. There are opportunities for career advancement into leadership and management roles.

Midwife

$2,204 | Very high skill | Very strong

Midwives provide care, education, advice and support to women and their families during pregnancy, labour and birth, and provide postnatal care to women and babies in the early weeks following birth.

Midwives:

- provide clinical midwifery care and support for women, their babies and their families
- detect any complications that may develop for a mother or her baby
- arrange appropriate consultations and referrals, and implement emergency measures when necessary
- work as a part of a multidisciplinary team, liaising with other healthcare professionals to provide the best care for childbearing women, their babies and families
- observe, monitor, assess, report and document care provided to women and their babies, as well as their responses to treatment
- administer medication to women and their babies as required
- prepare women for operative birth and provide post-operative care
- provide education and advice about health matters for women, their families and the wider community
- answer questions and provide information to women and their families about treatment and care
- contribute to the clinical training of midwifery, medical and other students
- directly supervise other health professionals who may be involved in the care of women and their babies as required.

Midwives usually work to a rotating seven-day roster that includes morning, afternoon and night shifts, as well as weekends and public holidays. Alternatively, they may work in more flexible models of care that allow them to structure their working hours around the needs of the women for whom they care. They are often required to work on call.

Personal Requirements

- Good communication skills
- Able to assume responsibility and take leadership
- Able to take initiative in emergencies
- Able to work under pressure
- Tolerant and patient when dealing with people from a wide range of backgrounds
- Able to work as part of a team
- Able to cope with the physical and psychological demands of the job

Education and Training

To become a midwife you usually have to study midwifery at university. Alternatively, you can undertake a postgraduate qualification in midwifery if you have completed a degree in registered nursing.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology and chemistry are normally required. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree and registration as a nurse. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.

It is a legal requirement for graduates to be registered with the Nursing and Midwifery Board of Australia before practising as a midwife in any state or territory in Australia. For full details, visit the board's website.

Employment Opportunities

Midwives may work in public and private hospitals, community and home-based services, community health centres and development programs, women's shelters, women's prisons, the armed forces, refugee centres and fertility clinics. Midwives may be required, or have the opportunity, to work in rural and remote areas. They may also work in private practice by themselves, with other midwives or with a doctor.

Midwives are also employed in international aid agencies and the Royal Flying Doctor Service. An increasing number of midwives are self-employed as consultants and educators.

Midwifery is a growing professional area and there are varied opportunities for midwives to work in clinical settings, as well as within education and research. With experience, and sometimes further training, midwives may take on supervisory or management positions.

Related Jobs

Anaesthetic Technician (p 168); Counsellor (p 170); Health Promotion Practitioner (p 174); Medical Practitioner (p 202); Nurse - Enrolled (p 212); Occupational Therapist (p 225); Paramedic (p 205); Physiotherapist (p 227).

Nurse – Enrolled

$1,426 | High skill | Moderate

Enrolled nurses, under the direction and supervision of registered nurses, assist with the provision of acute, preventative, curative and rehabilitative nursing care in hospitals, aged-care facilities, the community and other healthcare settings.

Enrolled nurses:

- assist with initial and ongoing health assessments and the maintenance of patients' health
- observe, measure and record patients' conditions (their temperature, pulse, respiration, blood pressure and blood sugar levels, for example)
- report changes in patients' conditions
- attend to patients' hygiene and comfort by assisting with bathing, showering, dressing and bed-making
- assist patients with meals when required
- assist patients with rehabilitation exercises and programs
- assist in the care of wounds
- assist in emergency situations
- assist in providing education on health and lifestyle issues
- maintain a safe environment for patients and assist with the prevention of injuries.

Enrolled nurses may be required to work shifts involving nights, weekends and public holidays.

Personal Requirements

- Good communication skills
- Tolerant, patient and tactful when dealing with people of different backgrounds, ages and cultures
- Able to follow instructions precisely
- Able to work as part of a team
- Able to cope with the physical and psychological demands of the job
- Able to solve problems and make decisions

Education and Training

To become an enrolled nurse you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Additional Information

Before undertaking the clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.

It is a legal requirement for graduates to be registered with the Nursing and Midwifery Board of Australia before practising as an enrolled nurse in any state or territory of Australia. For full details, see the board's website.

Opportunities exist for enrolled nurses to build on their skills and training in specific nursing areas. Courses are conducted according to local needs and include acute care, child and family health, community nursing, rehabilitation nursing, wound management, perioperative nursing and disability nursing. Enrolled nurses may be entitled to special entry conditions when applying for undergraduate registered nursing courses.

Employment Opportunities

Enrolled nurses may be employed in acute care; general and mental health hospitals; residential aged-care facilities; hostels; extended care facilities; and occasionally in community service settings.

Related Jobs

Aged Care Worker (p 167); Disability Support Worker (p 172); Health Promotion Practitioner (p 174); Operating Theatre Technician (p 179); Ward Assistant (p 181).

Nurse – Registered

$1,909 | Very high skill | Very strong

Registered nurses assess, plan, provide and evaluate preventative, curative and rehabilitative care for patients, clients and residents in a wide variety of settings. Areas of specialist nursing practice include emergency, trauma nursing, mental health, aged care, cancer/oncology, critical care, perioperative, community health, rural and remote health, as well as policy, research, management, education and workplace health and safety.

Registered nurses:

- provide physical and technical nursing care and support for patients
- provide emotional and psychological support and health information to patients and their families
- supervise or carry out nursing care of patients
- observe, monitor, assess, report and document patients' conditions and responses to treatment
- administer medicines and other prescribed medical treatments to patients, in accordance with relevant legislation
- monitor and adjust medical equipment used in patient care and treatment, which can be highly technical and complex
- prepare patients for surgical operations, assisting with surgical procedures and the provision of post-operative care, such as wound care and nutritional management
- plan and provide rehabilitative care of patients, including discharge planning and care
- provide first aid, perform routine physical examinations, give advice about health matters and maintain sickness and

accident records (where employed by large industrial or commercial organisations)
- contribute to the clinical training of nursing and midwifery students
- supervise nursing support staff and other hospital staff.

In hospitals, nurses usually work according to a rotating seven-day roster that includes morning, afternoon and night shifts, as well as weekends and public holidays. In other areas, the hours depend on the service.

Specialisations

- Clinical Nurse Specialist
- Community Health Nurse
- Mental Health Nurse
- Nurse Educator
- Nurse Practitioner
- Nurse Researcher
- Practice Nurse

Personal Requirements

- Good communication skills
- Able to assume responsibility and a leadership role
- Able to take initiative in emergencies
- Tolerant, patient and tactful in dealing with people from a wide range of backgrounds and cultures
- Able to work both independently and as part of a team
- Able to cope with the physical demands and psychological aspects of the job

Education and Training

To become a registered nurse you usually have to study nursing at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, physics and chemistry are normally required. Applicants may also be required to attend an interview. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking the clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.

Clinical placements may require travel to both metropolitan and rural areas.

It is a legal requirement for graduates to be registered with the Nursing and Midwifery Board of Australia before being able to practise as a nurse in any state or territory in Australia. For full details, see the board's website.

Following registration, there are courses available in a range of clinical specialities, including medical-surgical, mental health, paediatric, emergency, critical care, palliative care, occupational health and community nursing. There are also postgraduate nursing courses available in management and education.

Registration permits a person to work as a registered nurse in any relevant area of employment, except midwifery, which is restricted to registered midwives only. To become a midwife you must either complete postgraduate study in midwifery or a Bachelor of Midwifery. see the separate entry for Midwife for more information.

Employment Opportunities

Registered nurses may work in public and private hospitals; community and home-based services such as doctors' surgeries, community health centres and development programs, and youth and women's shelters; and school and university health clinics. They may also work in remote and rural areas.

Nurses are also employed by the Defence Force, international aid agencies and the Royal Flying Doctor Service. An increasing number of nurses are becoming self-employed as consultants or educators, or working through nursing agencies.

With experience, and sometimes further study, registered nurses may progress to unit manager or nursing manager roles. The increasing variety of specialist services and advances in medical technology have increased the demand for nurses with training and experience in specialist areas.

Related Jobs

Anaesthetic Technician (p 168); Counsellor (p 170); Hospital Administrator (p 175); Medical Practitioner (p 202); Midwife (p 177); Nurse - Enrolled (p 212); Occupational Therapist (p 225); Paramedic (p 205); Physiotherapist (p 227); Rehabilitation Counsellor (p 228).

For your career. Ranked #1* by the people who matter—you.

THE GOOD UNIVERSITIES GUIDE* 2024 LEARNER ENGAGEMENT
THE GOOD UNIVERSITIES GUIDE* 2024 LEARNING RESOURCES
THE GOOD UNIVERSITIES GUIDE* 2024 OVERALL EXPERIENCE
THE GOOD UNIVERSITIES GUIDE* 2024 SKILLS DEVELOPMENT
THE GOOD UNIVERSITIES GUIDE* 2024 STARTING SALARY
THE GOOD UNIVERSITIES GUIDE* 2024 STUDENT SUPPORT
THE GOOD UNIVERSITIES GUIDE* 2024 TEACHING QUALITY

Avondale UNIVERSITY

Good Universities Guide 2024*

Pharmacy

Pharmacy is a specialised field that is ideal for those with a passion for science, health care and medicine. It also offers a range of career options in other health-related fields such as health services and support, medicine, nursing and rehabilitation and veterinary science.

Courses and specialisations

Degrees in pharmacy typically centre around four core areas: medicinal chemistry (the chemistry of drugs), pharmacology (the action of drugs), pharmaceutics (the formulation of drug dosages) and pharmacy practice.

To practise as a pharmacist, graduates must complete a set number of hours of pre-registration training under the supervision of a registered pharmacist and sit an examination.

The majority of pharmacy graduates complete their pre-registration year in either community pharmacies or hospital pharmacies. The Pharmacy Board of Australia sets these accreditation requirements.

Where to study

Over the last decade, the number of universities offering pharmacy degrees has increased significantly, particularly with the introduction of courses with a targeted focus on pharmacy in rural and regional areas.

Pharmacy courses tend to be tightly regulated by the profession and entry is competitive, usually demanding high ATARs and good scores in the University Clinical Aptitude Test (UCAT). However, graduates who succeed in getting through the demanding four-year courses can look forward to excellent employment prospects.

Five-star universities

Educational experience

GRIFFITH	87.6%
CURTIN	78.6%
MONASH	78.3%
TASMANIA	78.0%

National average
75.5%

Graduate employment

NEWCASTLE	100.0%
QUEENSLAND	98.7%

National average
95.9%

Learner engagement

JCU	78.0%
MONASH	76.3%
LA TROBE	67.9%

National average
59.6%

Learning resources

QUEENSLAND	92.6%
GRIFFITH	91.1%
NEWCASTLE	86.7%

National average
83.3%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

4,607
Undergraduate

2,247
Postgraduate

743
International undergraduate

What can I do?

- Clinical resourcing
- Medical sales
- Chemistry
- Pharmacy
- Complex care
- Drug safety

Graduate starting salary

$56,400
Undergraduate

$68,700
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

95.9%
Undergraduate

95.9%
Postgraduate

Five-star universities

Median starting salary

JCU	$62,600
TASMANIA	$60,100
CDU	$59,800

National average
$56,400

Skills development

LA TROBE	91.8%
MONASH	91.5%
SYDNEY	85.3%
QUEENSLAND	85.2%
QUT	84.7%

National average
84.5%

Student support

JCU	82.1%
GRIFFITH	81.9%
MONASH	79.8%

National average
75%

Teaching quality

GRIFFITH	90.8%
LA TROBE	90.2%
MONASH	87.4%

National average
81.6%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Pharmacist

$1,862 | Very high skill | Moderate

Pharmacists supply, dispense and manufacture medicines and pharmaceutical products in hospitals and community pharmacies, and advise on their appropriate use. They also conduct research into the formulation, production, storage, quality control and distribution of medicines and pharmaceutical products.

Pharmacists:

- prepare or supervise the dispensing of medicines, ointments and tablets
- provide advice about how medicines are to be taken or used in the safest and most effective way in the treatment of common ailments
- advise consumers and other health professionals about medicines (both prescription and over-the-counter medicines), including appropriate selection, dosage and drug interactions, potential side effects and therapeutic effects
- select, advise on and supply non-prescription medicine, sick room supplies and other products
- develop legal and professional practice standards, and advise on government controls and regulations concerning the manufacture and supply of medicines
- work in the research and development of medicines and other health-related products
- manage pharmacies or pharmaceutical companies.

Specialisations

- Community Pharmacist
- Consultant Pharmacist
- Government Pharmacist
- Hospital Pharmacist
- Industrial Pharmacist

Personal Requirements

- Careful and methodical
- Able to work independently
- Good communication skills

Education and Training

To become a pharmacist you usually have to complete a degree in pharmacy at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. You may also be required to attend an interview. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.

To practise as a pharmacist in Australia, it is necessary to be registered with the Pharmacy Board of Australia. Before applying for full registration, pharmacy graduates must successfully complete a set number of hours of supervised practice while undertaking an accredited intern training program, and pass a written and oral examination conducted by the board. For full details, see the Pharmacy Board of Australia's website.

Students, interns and graduates are eligible for membership of the Pharmaceutical Society of Australia and the Society of Hospital Pharmacists of Australia.

Employment Opportunities

Most pharmacists work in community pharmacies, with some owning their own practice or partnership. They also work in hospital pharmacies providing services to patients. A number are employed by pharmaceutical companies in drug research, marketing and design, or by universities and TAFE institutes.

Related Jobs

Biotechnologist (p 234); Chemist (p 235); Forensic Scientist (p 237); Medical Scientist (p 203); Pharmacologist (p 216); Sales Assistant (p 269); Toxicologist (p 207).

Pharmacologist

$1,794 | Very high skill | Moderate

Pharmacologists evaluate the origin, effects and mechanisms of drugs and develop them for human and animal use.

Pharmacologists:

- discover, develop and evaluate substances for use in the treatment of disease
- modify the chemical structure of an effective substance to eliminate undesirable side effects
- devise and carry out experiments to determine how drug concentrations in the body change over time
- test newly discovered or manufactured substances for their safety, characteristics and possible use as drugs
- study what happens to a drug after it has been administered
- investigate drugs for unwanted or dangerous side effects and, if found, establish why they occur
- study other substances that affect living organisms, such as pollutants, poisons and insecticides
- write scientific reports on research and investigations, as well as more general information for scientific, managerial,

political and general audiences
- provide policy and clinical advice to managers, politicians, primary producers, healthcare workers and the general public.

Personal Requirements

- Enjoy and have aptitude for science and research
- Able to think logically and analytically
- Able to carry out detailed and accurate work
- Good communication skills
- Able to think creatively and solve problems
- Able to work as part of a team

Education and Training

To become a pharmacologist you usually have to complete a degree in biomedical science, medical science, pharmaceutical science or science at university with a major in pharmacology. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry, earth and environmental science, and physics are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Pharmacologists are employed across several industries, including the pharmaceutical industry, scientific research, post-school education, government and private sector organisations (including research organisations), hospitals and other health services.

Related Jobs

Chemist (p 235); Environmental Scientist (p 31); Forensic Scientist (p 237); Marine Biologist (p 241); Tissue Culture Technician (p 246); Veterinarian (p 337); Zoologist (p 338).

Future Fit your life with our Bachelor of Pharmacy with Honours.

Study on campus or online.

une.edu.au/pharmacy

Psychology

The work of a psychologist involves much more than counselling. It can lead to fields such as organisational psychology, industrial psychology and sports psychology. Psychology is listed separately from the other social and behavioural sciences because it can lead to a specific profession with its own strict rules for admission and practice. It is quite different to courses in counselling, which are often bundled in with the humanities.

Courses and specialisations

While the common focus of psychologists was previously on helping individuals to overcome problems, the field of psychology is now much broader. Today, many psychology graduates work with organisations or with teams of elite sportspeople. Others help clients with issues such as addictions, depression, eating disorders, fears and phobias, career planning, child behavioural problems, sleep disorders and relationships.

Accredited psychologists can choose to specialise (usually by undertaking further study) in a variety of areas, the most common being clinical psychology, counselling psychology and organisational psychology.

There is a vast range of careers available: everything from market research, advertising, management and business consultancy to human resource management, teaching and social welfare work.

Where to study

Courses in psychology are widely available at most universities around the country. You can choose to study a generalist degree, such as arts, or a stand-alone Bachelor of Psychology. The pathway to becoming an accredited practising psychologist goes beyond successfully completing a bachelor degree: you need at least five years of study in psychology, followed by one year of supervised internship. The courses must be accredited by the Australian Psychology Accreditation Council.

Five-star universities

Educational experience

UniSQ	90.3%
BOND	88.4%
FLINDERS	87.1%
ECU	85.9%
DEAKIN	85.5%
CQUni	84.6%
UWA	84.4%
UNE	83.7%
SUNSHINE COAST	83.6%

National average
78.7%

Graduate employment

CDU	81.8%
UNE	79.2%
CSU	77.6%
NOTRE DAME	75.0%
CANBERRA	74.1%
ACU	71.3%
CQUni	70.9%
UNSW	68.5%

National average
64.7%

Learner engagement

BOND	78.5%
NOTRE DAME	67.4%
SUNSHINE COAST	57.1%
ACU	53.3%
VU	53.2%
QUEENSLAND	52.1%
ADELAIDE	49.9%
WOLLONGONG	49.8%
UNSW	49.5%

National average
41.8%

Learning resources

UniSQ	97.1%
BOND	96.2%
UWA	92.7%
ECU	91.7%
SUNSHINE COAST	91.3%
DEAKIN	90.9%
UniSA	89.1%
FLINDERS	88.7%

National average
84%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

9,926
Undergraduate

14,865
Postgraduate

3,450
International undergraduate

What can I do?

- Human services
- Research
- Counselling
- Education
- Social work
- Mental health

Graduate starting salary

$40,200
Undergraduate

$55,500
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

64.7%
Undergraduate

82.4%
Postgraduate

Five-star universities

Median starting salary

CSU	$56,800
JCU	$54,200
ACU	$52,200
ANU	$52,000
CQUni	$49,100
CDU	$49,100
UNE	$47,800

National average
$40,200

Skills development

UniSQ	90.0%
BOND	86.1%
MURDOCH	85.6%
CQUni	85.3%
DEAKIN	85.0%
SUNSHINE COAST	84.4%
CANBERRA	84.1%
UniSA	83.9%
NEWCASTLE	83.8%
VU	83.5%

National average
80.7%

Student support

BOND	92.7%
UniSQ	87.1%
CQUni	86.1%
SOUTHERN CROSS	85.7%
DEAKIN	84.7%
UniSA	83.8%
FEDERATION	83.0%
ECU	82.9%
SUNSHINE COAST	82.9%
FLINDERS	82.7%

National average
76.4%

Teaching quality

FLINDERS	91.2%
BOND	90.8%
UniSQ	90.0%
DEAKIN	89.9%
CQUni	89.1%
UWA	87.1%
ECU	87.0%
QUEENSLAND	86.9%

National average
83.3%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Psychologist

$1,857

Very high skill

Very strong

Psychologists study human behaviour and the processes associated with how people think and feel, conduct research and provide treatment and counselling in order to reduce distress and behavioural and psychological problems. They promote mental health and positive behaviour in individuals and groups. Psychologists work on a broad range of issues with clients, including children, adults, couples, families and organisations.

Psychologists:

- conduct therapeutic interviews and provide counselling
- give psychological tests and assess the results to identify the source of problems and determine treatment
- construct tests to assess and predict mental and emotional states, as well as performance
- evaluate the results of programs aimed at improving personal and organisational effectiveness
- research psychological aspects of topics such as study motivation, teaching skills, occupational behaviour, working conditions and organisational structures
- provide follow-up services to groups and individuals for support and evaluation purposes
- contribute to government social policy development
- conduct academic research.

Personal Requirements

- Interested in people and human behaviour
- Able to listen and solve problems
- An inquisitive mind
- Emotional maturity and empathy for others
- Patient and perceptive
- Good oral and written communication skills

Education and Training

To become a psychologist you usually have to complete a degree with a major in psychology or a four-year Bachelor of Psychology. This is followed by either an accredited two-year postgraduate qualification (majoring in a specialisation of psychology) or two years of supervised experience with a registered psychologist.

Psychology can be studied as a major in an arts, social science or science degree. The fourth year of bachelor degree study, which is needed to satisfy registration requirements, may be undertaken as an honours year in the Bachelor of Psychology degree or as a Graduate Diploma of Psychology.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education with English. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

The Australian Psychology Accreditation Council (APAC) sets the standards for accreditation of Australasian psychology programs, ensuring that the standards of training remain rigorous and consistent across universities. For students to be eligible for registration, they must study a course that is accredited by APAC. Visit their website (www.psychologycouncil.org.au) for an up-to-date list of approved courses of study.

Following successful completion of an approved qualification, students who completed a four-year sequence of study followed by a two-year internship will need to pass the National Psychology Exam in order to gain general registration.

It is a legal requirement for graduates to be registered with the Psychology Board of Australia before being able to practise as a psychologist in any state or territory in Australia.

The Australian Psychological Society (APS) offers membership options to students who are studying an approved course. Visit their website for more information.

Employment Opportunities

Psychologists are employed by government and privately run community welfare organisations and by hospitals, industry and the Australian Defence Force. They are also employed in private practices and in private health clinics.

Many psychology graduates do not find work as psychology specialists but are employed in positions where they can use the skills learnt through their psychology training. Research skills are especially useful in market research, advertising, management or business consultancy. Other areas that provide employment for psychologists include social welfare, community work, human resource management, training, teaching and lecturing, and clerical and administrative work.

Related Jobs

Career Development Practitioner (p 122); Counsellor (p 170); Health Promotion Practitioner (p 174); Market Researcher (p 73); Marketing Officer (p 74); Rehabilitation Counsellor (p 228); Social Worker (p 250); Teacher - Early Childhood (p 125); Teacher - Special Education (p 130); Youth Worker (p 251).

Found your career of interest? Discover what course you need to study.

Visit gooduniversitiesguide.com.au/careers-guide to view and compare all the courses leading to your target career.

Rehabilitation

Rehabilitation courses prepare you for occupations in fields such as physiotherapy, occupational therapy, medicine and speech pathology. Graduates can work in a broad range of settings in both public and private healthcare organisations.

Courses and specialisations

Courses in the rehabilitation professions typically involve four years of full-time study and several core subjects required to gain professional accreditation. Many involve practical placements, and considerable amounts of time may need to be spent in a clinical setting gaining hands-on experience.

Some of the majors you can study in this field include audiology, chiropractic, occupational therapy, orthoptics, osteopathy, physiotherapy, podiatry and speech pathology.

Graduates may find themselves working in hospitals, rehabilitation centres, community health centres, private practice, schools, mental health services, sports clinics, sporting teams or fitness centres. They may also work in government departments or universities in managerial or research positions.

Where to study

You cannot practise unless you meet the very strict requirements set by each profession. This means that the courses within each field tend to be very similar no matter where you do them, although the sub-fields are obviously very different from each other. When considering your course options, you may want to check out what each institution offers in the way of clinical facilities and placements.

These courses are still in fairly limited supply, meaning that depending on where you live, you might have to be prepared to travel to study your preferred course. Demand for entry is high, making them tough to get into in some cases.

Five-star universities

Educational experience

FLINDERS	94.7%
NOTRE DAME	94.7%
ECU	89.4%
CQUni	89.0%
ACU	88.4%
SUNSHINE COAST	87.8%

National average
81.9%

Graduate employment

CQUni	100.0%
SUNSHINE COAST	100.0%
FLINDERS	98.3%
JCU	96.8%

National average
92.5%

Learner engagement

FEDERATION	86.8%
FLINDERS	86.8%
CQUni	84.3%
NOTRE DAME	80.2%
ECU	79.7%

National average
67.1%

Learning resources

FEDERATION	94.6%
ECU	93.8%
CQUni	91.5%
JCU	91.0%
SUNSHINE COAST	90.7%

National average
85.4%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

9,913
Undergraduate

8,902
Postgraduate

2,129
International undergraduate

What can I do?

- Health care
- Personal training
- Health counselling
- Rehabilitation
- Disability care
- Exercise physiology

Graduate starting salary

$61,000
Undergraduate

$65,000
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

92.5%
Undergraduate

93.2%
Postgraduate

Five-star universities

Median starting salary

CANBERRA	$65,300
QUEENSLAND	$64,600
CQUni	$64,400
JCU	$64,300

National average
$61,000

Skills development

FLINDERS	97.1%
FEDERATION	96.1%
NOTRE DAME	94.5%
JCU	94.3%
ACU	92.7%

National average
88.7%

Student support

NOTRE DAME	87.5%
JCU	85.7%
CQUni	84.3%
VU	83.3%
ECU	83.2%

National average
77%

Teaching quality

FLINDERS	97.2%
NOTRE DAME	96.8%
ECU	91.7%
ACU	91.6%
CQUni	91.4%
JCU	91.2%
FEDERATION	90.8%

National average
86.2%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Chiropractor

Very high skill Very strong

Chiropractors diagnose and treat health problems related to the nervous, muscular and skeletal systems, particularly the spine, without the use of drugs or surgery.

Chiropractors:

- note down patients' case history details, conduct physical examinations and interpret diagnostic imaging studies such as X-rays
- adjust patients' spine or other joints to correct joint dysfunctions interfering with proper nervous system control and integration of body function
- treat patients by adjusting the spinal column to manipulate joints and soft tissues
- conduct specialised work such as sports chiropractic, paediatrics, diagnostic imaging or various chiropractic techniques
- give advice about general health matters such as exercise and nutrition
- perform pre-employment examinations and workplace assessments
- provide certificates for insurance and work-related purposes.

Personal Requirements

- Enjoy health sciences
- Strong interpersonal skills
- Attention to detail
- Ability to perform fine manual tasks
- Able to think and work independently
- Strong analytical ability

Education and Training

To become a chiropractor you usually have to complete a degree in chiropractic science at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics and chemistry are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information. Graduates are required to complete extensive clinical practice before receiving full accreditation. It is a legal requirement for graduates to be registered with the Chiropractic Board of Australia before practising as a chiropractor in any state or territory in Australia.

Employment Opportunities

Opportunities exist for new graduates to work as locums (temporary relief workers) or as associates of established clinics. They may also set up their own practices. Research and teaching positions may be available in some areas. Established chiropractors usually work in their own private practice or in clinics with other healthcare professionals. They may also act as allied health consultants in areas such as occupational health and safety, sport, rehabilitation, health insurance assessment and medico-legal advising. Job prospects depend on consumer demand for drug-free approaches to health care, both in Australia and throughout the world. Chiropractic care has recently become more accepted as a result of research and changing attitudes about alternative, drug-free, non-invasive healthcare practices. Prospects are also likely to be affected by an increase in the number of elderly people in the population, as this group is more likely to experience health problems that are treatable by chiropractors. Demand is also affected by the extent to which chiropractic services are covered by private health insurance providers.

Related Jobs

Chinese Medicine Practitioner (p 201); Massage Therapist (p 175); Medical Practitioner (p 202); Natural Therapist (p 177); Physiotherapist (p 227).

Clinical Exercise Physiologist

$1,219 Very high skill Strong

A clinical exercise physiologist is a healthcare professional who specialises in prescribing and delivering exercise programs for individuals with medical conditions, injuries or chronic diseases.

Clinical exercise physiologists:

- conduct assessments and evaluations to determine patients' health status, exercise capacity and individual needs
- develop and implement personalised exercise programs tailored to patients' specific conditions, limitations and goals
- monitor and evaluate patients' progress, adjusting exercise prescriptions as necessary
- provide education and guidance to patients on proper exercise techniques, healthy lifestyle choices and injury prevention
- collaborate with other healthcare professionals, such as physicians and physiotherapists, to ensure coordinated care for patients
- conduct research and contribute to evidence-based practice in the field of clinical exercise physiology
- keep accurate and confidential patient records.

Clinical exercise physiologists work in a variety of settings, including hospitals, private clinics, rehabilitation centres and community health centres. They may also offer home-based consultations. The role involves working closely with patients, often on a one-on-one basis. Working hours may vary, including evenings and weekends, to accommodate patient needs and clinic schedules.

Specialisations

- Cardiac rehabilitation
- Chronic disease management
- Musculoskeletal rehabilitation
- Mental health

Personal Requirements

- Strong interpersonal and communication skills to effectively interact with patients
- A genuine interest in promoting health and wellbeing
- Compassion and empathy
- Detail-oriented
- Good problem-solving skills
- Able to adapt to different patient needs and situations

Education and Training

To become a clinical exercise physiologist, a minimum of a bachelor degree in exercise physiology or a related field is typically required. Accreditation with Exercise and Sports Science

Australia (ESSA) as an Accredited Exercise Physiologist (AEP) is essential. Ongoing professional development and participation in continuing education programs are important to stay updated with the latest research and treatment techniques in the field.

Employment opportunities

Employment opportunities for clinical exercise physiologists exist in various healthcare settings, including hospitals, rehabilitation centres, private clinics and community health programs. They may also find opportunities in research institutions and academic settings.

Occupational Therapist

Occupational therapists assess and treat people who, due to illness, injury or circumstance, are limited in their ability to undertake everyday activities.

They assist people to regain lost functions, develop their abilities and social skills, as well as maintain and promote independence in their everyday lives to enhance health and wellbeing.

Occupational therapists:

- conduct tests to assess functional, emotional, psychological, developmental and physical capabilities
- plan and direct specific therapeutic programs for individuals using recreational, remedial, social, educational or vocational (job-related) activities
- select and design activities that improve an affected movement or function and help individuals to regain personal care skills
- assist people to gain or regain skills in social, leisure and work environments through graded individual or group therapy and activity programs
- monitor the progress of individuals and assist with the coordination of an appropriate health team
- assist children with disabilities to integrate into education programs in schools
- assess the ability of injured workers to return to their usual employment or perform alternative duties
- design and modify the everyday environment of clients to allow for better access and independence
- advise on the use of specialised equipment
- assess the need for, develop and run health education programs
- act as consultants to industry and government organisations
- undertake research
- teach in academic institutions, generally at tertiary level
- assist with policy development for health and other areas.

Occupational therapists may work in areas such as:

- Aged care - providing programmes and equipment for people with medical and social problems associated with ageing.
- Disabilities - working with people who have an intellectual, physical or sensory disability through planned activity programmes over long periods of time.
- General medicine - working in hospitals or private practice to assess and treat individuals with physically disabling diseases or injuries.
- Occupational health - assessing the safety of work environments and injured workers, providing rehabilitation and advice about adaptations for their return to the workplace.
- Health promotion - assisting people who want to achieve a balanced and healthy lifestyle.
- Paediatrics - working in hospitals, private practices or schools to assess and treat children with disabilities, developmental delays or learning difficulties.
- Psychiatry - assessing and treating individuals with mental illness and behavioural disorders through programmes involving such methods as stress management.
- Vocational rehabilitation - assisting injured workers to return to work.

Personal Requirements

- Patience
- Able to show initiative
- A flexible attitude
- Practical, innovative and observant
- Good problem-solving skills
- Good interpersonal and communication skills
- Able to maintain client confidentiality
- Able to work independently or as part of a team

Education and Training

To become an occupational therapist you usually have to complete a degree in occupational therapy at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, biology, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.

It is a legal requirement for graduates to register with the Occupational Therapy Board of Australia before practising as an occupational therapist in any state or territory of Australia. Visit the board's website for more details.

Employment Opportunities

Occupational therapists work in public and private healthcare organisations. These may include general and children's hospitals, aged-care facilities, rehabilitation centres, day care centres, community health centres, municipal councils, primary and secondary schools, prisons, centres for people with disability, independent living centres and other organisations. They may also work in private practice as clinicians, consultants or as injury management advisers.

Employment opportunities are influenced mainly by the ageing of the population, levels of government funding and government policy initiatives.

Related Jobs

Aged Care Worker (p 167); Disability Support Worker (p 172); Diversional Therapist (p 172); Midwife (p 177); Podiatrist (p 227); Teacher - Special Education (p 130).

Optometrist

Very high skill

Strong

Optometrists perform eye examinations to determine the presence of vision problems and other eye conditions and disease. They treat or manage these problems by prescribing glasses, contact lenses, optical aids, vision therapy, medication (in the form of eye drops) or referral to an eye surgeon when required.

Optometrists:

- determine the nature and extent of vision and eye problems and disease by examining patients' eyes using specialised instruments, techniques and tests
- correct vision defects by prescribing and dispensing glasses or contact lenses, special optical aids or vision therapy
- examine patients for signs of eye disease and systemic conditions, including glaucoma, diabetes, high blood pressure and multiple sclerosis, and work with medical practitioners and eye surgeons to co-manage patients when required
- manage some eye conditions by prescribing ocular therapeutic drugs
- monitor patients' vision and ocular health with the use of imaging techniques such as digital retinal photography and computerised vision tests
- conduct eye screening and testing for the purposes of determining occupational fitness or fitness to drive
- undertake managerial, retail and administrative tasks.

Most optometrists are in daily contact with members of the public on a one-on-one basis.

Personal Requirements

- Patient and caring manner
- Able to carry out accurate and precise work
- Good communication skills
- Enjoy helping people

Education and Training

To become an optometrist you usually have to study optometry at university. Alternatively, you can complete a degree in vision science or a relevant area at university, followed by a postgraduate qualification in optometry.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry, biology and physics are normally required. You may also be required to sit the Undergraduate Medicine and Health Sciences Admission Test (UMAT). Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.

Employment Opportunities

Most graduates enter private practice on completion of their course. Some graduates choose to embark on non-clinical careers that make use of their skills as visual scientists. Most non-clinical positions are in universities and research organisations or with companies involved in the manufacture of optical instruments and lenses.

As optometry becomes more diversified, there are increasing opportunities for specialisation in areas such as ocular disease, sports vision, children's vision and industrial vision practices.

Osteopath

Very high skill

Very strong

Osteopaths diagnose, treat and provide preventative advice about disorders that affect the body's musculoskeletal system, using manual techniques to alleviate stresses and dysfunction to improve the body's function.

Osteopaths:

- diagnose patients' complaints using information from case histories, physical examinations, observation of patients' body structure and mobility, and medical imaging and laboratory tests
- treat biomechanical complaints (including backache, general joint problems, sports injuries, arthritis, stress and repetitive strain injuries), some breathing problems (such as asthma) and a wide range of general medical complaints (headaches, for example)
- treat patients using a variety of manual techniques, such as soft tissue stretching, muscle relaxation, gentle mobilisation or manipulation
- treat children for the after-effects of birth trauma and childhood accidents
- devise exercise and nutritional programs.

Osteopaths work in association with medical practitioners, surgeons, midwives, physiotherapists, podiatrists and a range of complementary and alternative medical practitioners. They have a high level of contact with the public.

Personal Requirements

- Independent and highly motivated
- Interested in health science and human anatomy
- Good hand-eye coordination
- Good communication skills
- Interested in people and their health

Education and Training

To become an osteopath you usually have to complete a degree in clinical sciences at university with a major in osteopathic studies, followed by a postgraduate qualification in osteopathy. Alternatively, you can complete a double degree in health science and applied science (osteopathy).

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry, biology and physics are normally required. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Entry can be highly competitive, and applicants may be required to attend an interview. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.

Employment Opportunities

The majority of osteopaths are self-employed, but newly qualified osteopaths often work with an established clinic before starting

their own practice. A small but growing number are based in private medical practices and specialist services such as pain management and aged-care facilities. Job prospects depend on the location in which you wish to practise and the level of community awareness of osteopaths as allied health workers.

Related Jobs

Chiropractor (p 224); Massage Therapist (p 175); Medical Practitioner (p 202); Physiotherapist (p 227); Podiatrist (p 227).

Physiotherapist

$1,444 | Very high skill | Very strong

Physiotherapists assess, treat and prevent disorders in human movement caused by injury and disease. Further into their career, physiotherapists can choose to practise in specific areas such as muscle and skeletal conditions, women's health, aged care, chest conditions, occupational health and safety, sports injuries, babies and young children, problems of the nervous system and spinal injuries, administration, education or research.

Physiotherapists:

- assess the physical condition of patients to diagnose problems and plan appropriate treatment
- use a range of techniques to strengthen and stretch muscles and joints to improve patient mobility (such as massage, hydrotherapy, breathing and relaxation techniques)
- perform spinal and peripheral joint mobilisation and manipulation
- use equipment such as heat packs, ice packs, exercise equipment, ultrasound and electrotherapy to ease pain, reduce swelling and improve range of movement
- retrain patients to walk or teach them to use devices such as walking frames, splints, crutches and wheelchairs
- educate patients, their families and the community to prevent injury and disability and to lead healthy lifestyles
- plan and implement community fitness programs
- maintain patient records.

Physiotherapists may work as part of a healthcare team, independently in private practice or as industry consultants.

Personal Requirements

- Patience
- An interest in people and their health
- Able to cope with the physical demands of the job
- Problem-solving skills
- Good communication skills

Education and Training

To become a physiotherapist you usually have to complete a degree in physiotherapy at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry, earth and environmental science and physics are normally required. You may also be required to attend an interview. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.

Employment Opportunities

Physiotherapists work in a variety of settings, including hospitals, community health centres, mental health services, rehabilitation centres, private practice clinics, within the school systems, government departments and universities. Physiotherapists can also work in managerial and research positions or as consultants.

Continued emphasis on sport and fitness, occupational health and safety, and aged care has increased the demand for physiotherapists. Opportunities also exist to become self-employed in private practice or to work part time.

Related Jobs

Massage Therapist (p 175); Medical Practitioner (p 202); Midwife (p 177); Nurse - Registered (p 212); Occupational Therapist (p 225); Podiatrist (p 227); Prosthetist/Orthotist (p 206); Rehabilitation Counsellor (p 228); Teacher - Physical Education (p 127).

Podiatrist

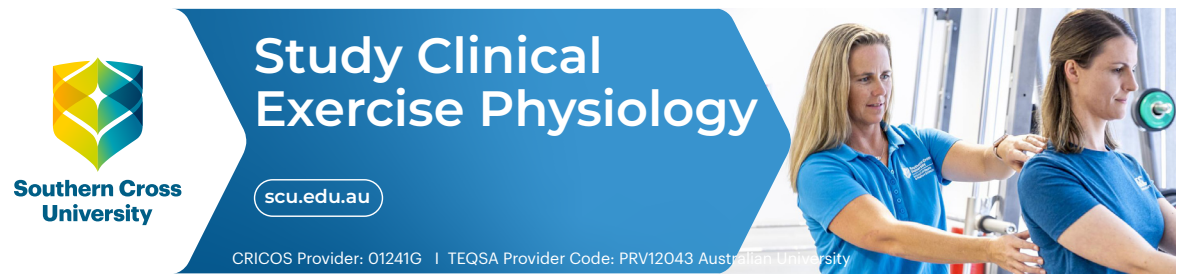
Very high skill | Very strong

Also known as Chiropodist

Podiatrists look after the health of people's feet by diagnosing, treating and preventing foot abnormalities, and educating the public about good foot health. Podiatrists may develop a special interest in dealing with particular client groups, such as children, the aged or sportspeople. They may also work in a particular area, such as occupational health, or with general medical conditions that result in foot and leg problems.

Podiatrists:

- examine patients' feet to diagnose any disorders or infections and decide on an appropriate treatment
- give advice about foot health and the prevention of foot disorders
- treat deformities such as flat feet and foot imbalance by using corrective devices such as orthoses
- work with patients suffering from diabetes, rheumatoid arthritis, peripheral vascular disorders and other neuropathies



- perform surgical procedures on feet
- treat abnormalities of bones, joints, skin and nails such as bunions, toe deformities, ingrown toenails, corns, warts and other infections
- recommend footwear for specific foot conditions
- prescribe orthotic devices for protection and correction of a wide range of foot and leg irregularities.

Personal Requirements

- Independent and highly motivated
- Interest in health care
- Good communication skills
- Able to cope with the physical demands of the job

Education and Training

To become a podiatrist you usually have to complete a degree in podiatry at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry, biology and physics are normally required. You may also need to demonstrate your suitability for, and interest in, podiatry by providing additional information, including details of relevant paid and unpaid work experience. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.

It is a legal requirement for graduates to be registered with the Podiatry Board of Australia before practising as a podiatrist in any state or territory in Australia. For full details, visit the board's website.

Employment Opportunities

Most podiatrists work in private practice as a sole proprietor, partner or employee. An increasing number are employed in community health centres, hospitals, rehabilitation centres, specialist high-risk clinics and sports medicine clinics. Some obtain teaching and research positions.

Podiatrists may also work in aged-care services, such as day care centres for the elderly, nursing homes and hostels, which they visit to treat residents. Many podiatrists also provide treatment in patients' homes.

Related Jobs

Chiropractor (p 224); Massage Therapist (p 175); Osteopath (p 226); Physiotherapist (p 227); Prosthetist/Orthotist (p 206).

Rehabilitation Counsellor

Rehabilitation counsellors assist people with disability or medical conditions or who are experiencing social disadvantage to attain individual rehabilitation goals, including return to paid employment. They assist people with physical or psychological disabilities, refugees, ex-offenders, disadvantaged youth and those experiencing long-term unemployment.

Rehabilitation counsellors:

- counsel clients adjusting to disability
- undertake comprehensive assessment of the client's vocational, social, medical, educational, personal and psychological needs in order to develop an individual rehabilitation plan
- plan, develop, implement and monitor individual client rehabilitation programs, ensuring appropriate services are provided within these programs
- refer clients for medical examinations and psychological or psychiatric evaluations
- use a variety of assessment tools, tests and strategies to assess a client's particular interests, abilities, skills, motivation, attitude, values and knowledge in order to establish life or vocational goals
- provide career development services to clients
- analyse and use labour market information when making decisions about a client's vocational choices
- arrange formal or on-the-job training for clients as part of their rehabilitation goals
- check a client's progress in training or employment phases of the rehabilitation program
- evaluate the effectiveness of redeployment and recommend further action
- manage the placement of clients into suitable paid employment or back into the community after coordinating the client's required training
- negotiate and manage a gradual return or introduction to a job to ensure a smooth transition
- talk to insurance companies, medical practitioners, community organisations and other professionals to ensure all parties are consulted regarding the client's individual rehabilitation program
- provide an information and advisory service to organisations that assist people with disability or social disadvantage.

Rehabilitation counsellors work as case managers and may be part of a team comprising medical, therapy and related rehabilitation personnel.

Personal Requirements

- Good communication skills
- Good problem-solving skills
- A supportive and tactful approach to people's problems
- Able to work independently or as part of a team

Education and Training

To become a rehabilitation counsellor you usually have to complete a degree in health science or an allied health field at university, followed by a postgraduate qualification in rehabilitation counselling.

To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry or physics is normally required. Entry to postgraduate courses usually requires completion of a relevant bachelor degree. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Rehabilitation counsellors are employed by agencies accredited under various compensation and labour market schemes. They may also work in private practice and in the in-house services of large companies. Demand for rehabilitation counsellors is influenced by government legislation regarding eligibility for disability benefits and employment services.

Related Jobs

Occupational Health and Safety Officer (p 178); Occupational Therapist (p 225); Physiotherapist (p 227); Social Worker (p 250).

Speech Pathologist

$1,827 | Very high skill | Very strong

Also known as Speech Therapist

Speech pathologists diagnose, treat and provide management services to people of all ages with communication disorders, including speech, language, voice, fluency, social communication and literacy difficulties. They also work with people who have problems with chewing or swallowing.

Speech pathologists:

- establish the exact nature and severity of each client's communication and/or swallowing problems, which may require the use of special equipment and tests
- plan and carry out treatment and management, taking into account age, social, educational and workplace needs, and physical and intellectual abilities
- prescribe electronic and non-electronic alternatives, and communication aids and devices
- work with children who are unable to communicate effectively due to intellectual disability, developmental delays, physical disability and/or learning difficulties
- treat adults whose language, speech or voice has been affected by surgery, disease or disorders of the nervous system, brain injury, dementia or hearing loss
- help children and adults to overcome stuttering
- assess and treat children and adults who have difficulty chewing and/or swallowing
- act as a consultant to education, medical, dental and other health professionals
- provide ongoing support, advice and information to clients, families and other significant persons (such as friends, carers and educators) in order to support successful communication interactions and safe and effective mealtimes.

Speech pathologists work closely with other health professionals as part of a team.

Personal Requirements

- Good listening and interpersonal skills
- Enjoy language and communication
- Able to inspire confidence and cooperation
- Enjoy working with people
- A patient and tactful approach to people's problems
- Able to deal with complex and unusual situations

Education and Training

To become a speech pathologist you usually have to complete a degree in speech pathology at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, biology, chemistry, physics and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking clinical placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.

Graduates are eligible for membership of Speech Pathology Australia. Most employers require applicants for speech pathology positions to demonstrate that they are eligible for current practising membership. For some employers, this is a mandatory requirement.

Employment Opportunities

Speech pathologists work in public hospitals, rehabilitation centres, community and mental health services, schools, kindergartens and specialist organisations providing services for people with disability. Speech pathologists may also work in private practice. Some are engaged in teaching and research.

Related Jobs

Audiologist (p 168); Audiometrist (p 169); Medical Practitioner (p 202); Physiotherapist (p 227); Rehabilitation Counsellor (p 228).

Science & mathematics

If you have a passion for discovery and problem-solving, you might consider one of the many courses available in science and mathematics. A double degree in either science or mathematics paired with something like education, engineering, law or business can expand your opportunities, providing you with a back-up in a tough job market. Related courses and occupations include computing and information technology, engineering and technology, mathematics, surveying, various health fields and veterinary science.

Courses and specialisations

Science

The following are just some of the science majors available: astronomy; biotechnology; chemistry; food science and technology; geology; marine science; medical science; meteorology; physics and zoology.

Many science courses focus on the 'pure' academic disciplines listed above. The advantage of this kind of broad education is that it leaves many career options open; the downside is that you might have some trouble finding a job. 'Applied' courses can help you develop a clearer career path.

Mathematics

If you're considering studying mathematics at university level, you've probably studied it throughout school and are reasonably proficient. The main subdivisions are: pure mathematics; applied mathematics; and statistics and operations research (including sampling theory, nonparametric statistical inference and stochastic processes).

Where to study

Most courses set prerequisites: often one or more of maths, chemistry, biology or physics. Science and mathematics can be tougher to get into than the humanities and social sciences, but are not too difficult overall. That said, cut-offs can vary depending on the specialisation and institution.

Five-star universities

Educational experience

BOND	89.8%
SUNSHINE COAST	86.2%
CQUni	85.1%
ECU	83.2%
UniSQ	82.9%
UniSA	82.6%
ADELAIDE	81.6%
GRIFFITH	80.8%

National average
75%

Graduate employment

CQUni	78.4%
CSU	78.0%
UniSQ	76.2%
UNE	75.4%
NOTRE DAME	73.3%
CANBERRA	72.7%
CURTIN	71.4%
UNSW	70.9%

National average
64.3%

Learner engagement

BOND	83.1%
NOTRE DAME	69.4%
ECU	67.1%
FLINDERS	65.4%
VU	64.9%
JCU	64.1%
QUT	63.8%
SUNSHINE COAST	60.9%
ACU	60.6%

National average
51.7%

Learning resources

BOND	99.0%
ECU	93.2%
SUNSHINE COAST	92.1%
FLINDERS	90.4%
FEDERATION	90.0%
GRIFFITH	89.7%
CANBERRA	89.7%
MACQUARIE	89.5%

National average
85.6%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide.*

Number of students

7,501
Undergraduate

25,847
Postgraduate

6,580
International undergraduate

What can I do?

- Accountancy and finance
- Agricultural engineering
- Banking
- Microbiology
- Surveying
- Meteorology

Graduate starting salary

$34,700
Undergraduate

$60,500
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

64.3%
Undergraduate

77.7%
Postgraduate

Five-star universities

Median starting salary

CSU	$53,800
CURTIN	$52,200
SUNSHINE COAST	$51,900
JCU	$49,800
UniSQ	$48,300
CANBERRA	$48,300
CQUni	$46,000
MACQUARIE	$45,100

National average
$34,700

Skills development

BOND	94.8%
NOTRE DAME	87.0%
ECU	86.5%
UTS	85.3%
CANBERRA	84.1%
VU	82.8%
FLINDERS	82.6%
FEDERATION	82.3%
QUT	82.1%
ACU	82.0%
ADELAIDE	81.8%
SUNSHINE COAST	81.8%
UniSA	81.5%

National average
78.2%

Student support

BOND	92.7%
SUNSHINE COAST	83.0%
UniSQ	82.8%
ECU	81.1%
ACU	80.8%
UNE	80.7%
FLINDERS	79.6%
FEDERATION	79.4%
GRIFFITH	79.4%
CANBERRA	79.3%
CQUni	78.6%

National average
72.2%

Teaching quality

BOND	94.0%
FEDERATION	89.5%
ECU	88.8%
SUNSHINE COAST	87.7%
UniSQ	86.2%
ACU	86.0%
ANU	85.8%
TASMANIA	85.2%
UniSA	85.1%
CANBERRA	84.7%
UTS	84.7%
GRIFFITH	84.6%

National average
81.5%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Animal Technician

Animal technicians help veterinary, medical, pharmaceutical, agricultural and general scientists and students to care for and check on animals used for research, breeding and scientific purposes.

Animal technicians:

- perform daily checks and record the health status and behaviour of animals in their care
- prepare food and water, and provide care for laboratory, field or zoo animals
- maintain zoo exhibits, holding or breeding areas and equipment
- assist in return-to-the-wild and animal enrichment programs
- carry out experiments using animals, recording the results under supervision and according to relevant codes of practice and the organisation's animal experimentation ethics committee rules
- examine animals and take samples of their body fluids, faeces or tissue for analysis or veterinary inspection
- observe animals' reactions to tests
- make routine calculations, such as for drug dosage, and prepare graphs
- clean and disinfect cages and facilities, and sterilise equipment
- work under supervision to establish and maintain breeding programs
- assist with fertility testing for sheep, cattle or poultry research
- assist in the selection and grading of animals for breeding programs
- help with injections, surgery, dressings and care of animals after operations
- euthanise animals humanely (under supervision) and handle animals that have died.

Animal technicians are usually required to work in shifts and on weekends. Some duties involve working with large animals and exotic species, which is often performed outdoors and conducted in all kinds of weather conditions. Much of their time is spent doing routine tasks such as cleaning exhibits and feeding animals.

Specialisations

- Field Assistant
- Zookeeper

Personal Requirements

- Enjoy practical and manual activities
- Interested in animals, their welfare and conservation
- Able to handle animals with confidence and patience
- Able to make accurate observations
- Free from allergies aggravated by animal hair, feathers, fur and dust
- Able to undertake manual and sometimes heavy work

Education and Training

To become an animal technician you usually have to complete a VET qualification in animal technology, captive animals or laboratory technology specialising in biological testing, environmental monitoring or biotechnology. Applicants may be required to attend an interview and/or have access to a relevant workplace. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.You can also become an animal technician through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

There is strong competition for positions in this field. Sources of employment include research institutions such as the Commonwealth Scientific and Industrial Research Organisation (CSIRO), government veterinary laboratories, universities, major hospitals, animal breeding establishments and zoos.

Related Jobs

Agricultural Technical Officer (p 28); Horse Trainer (p 336); Laboratory Worker (p 240); Shearer (p 37); Stablehand (p 38); Track Rider (p 272); Veterinarian (p 337); Veterinary Nurse (p 338); Zoologist (p 338).

Astronomer

Astronomers study planets, stars, galaxies and other objects in the observable universe and use this information for theoretical and practical purposes.

Astronomers:

- observe objects in space, from the Earth's surface and via orbiting satellites
- design and attach special equipment to telescopes or spacecraft when necessary
- make calculations using mathematical and physical principles
- record, analyse and compare results of observations
- develop theories to explain recorded observations and make predictions
- investigate the formation and evolution of the solar system
- produce star catalogues and tables of measurements for use in navigation, surveying, time determination and other disciplines
- develop instruments and detectors for all radiation observed from the Earth's surface or via spacecraft
- present the results of their work at scientific meetings and publish them in relevant scientific journals.

Astronomers usually perform either observational or theoretical tasks. They have three main areas of study: the movement and position of stars, planets, galaxies and other objects; their physical and chemical properties; and their origins and evolution.

Astronomers who need to make observations may need to travel long distances to observatories and may work long hours, often at night. However, more time is spent using computers than personally observing with telescopes.

Personal Requirements

- Imagination
- Patience
- An inquisitive mind
- Interested in mathematics, computing and physics
- Good oral and written communication skills

Education and Training

To become an astronomer you usually have to complete a degree in science at university with a major in astronomy, physics or astrophysics (preferably at honours level), followed by a postgraduate qualification in astronomy or astrophysics. To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects,

or assumed knowledge, in one or more of English, biology, chemistry, earth and environmental science, mathematics and physics are normally required. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Most astronomers work in government agencies, such as the Commonwealth Scientific and Industrial Research Organisation (CSIRO); in observatories, including the Australia Telescope National Facility (for radio astronomers) and the Australian Astronomical Observatory (for optical astronomers); or in universities.

These posts usually incorporate an element of teaching, administration or instrumentation design and development.

Many astronomers find work in related fields such as physics, applied mathematics and computing, and it is advisable to complete an additional major in one of these fields. Demand for this occupation is influenced by the level of government funding for research, capital investment and the opportunity for overseas research.

Biochemist

Also known as Molecular Biologist

Biochemists study the chemistry of living systems to increase scientific knowledge and develop ways to apply this knowledge in areas such as medicine, veterinary science, agriculture, environmental science and manufacturing. Biochemistry provides a basis for all the life sciences.

Biochemists:

- study the chemical processes that occur within individual cells
- study processes that involve whole organisms, such as digestion and growth
- undertake detailed chemical analysis using sophisticated instruments and techniques
- prepare, or supervise the preparation of, scientific reports and papers for journals based on observations and experiments.

Personal Requirements

- Enjoy chemistry, biology and mathematics
- Able to think logically and analytically
- Able to work independently or as part of a team
- Creative and imaginative

Education and Training

To become a biochemist you usually have to complete a science or applied science degree at university with a major in biochemistry, environmental chemistry, molecular biology or a related field. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, biology, chemistry, earth and environmental science, mathematics and physics are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Biochemists work in scientific research institutes, universities, and federal, state and territory government organisations such as the Commonwealth Scientific and Industrial Research Organisation (CSIRO).

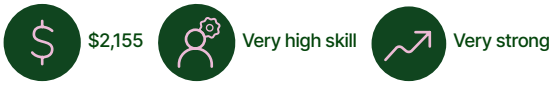
Biochemists also work in medical research centres and hospital laboratories, and for food processing or drug manufacturing companies. Due to the high degree of specialisation required in this field, completion of a postgraduate degree is generally required for advancement to senior scientific positions.

Employment is affected by factors such as the amount of funding provided for research in both the public and private sectors, and the general level of economic activity. Competition for jobs is strong.

Related Jobs

Biotechnologist (p 234); Chemist (p 235); Forensic Scientist (p 237); Medical Laboratory Technician (p 177); Medical Scientist (p 203); Pharmacologist (p 216); Toxicologist (p 207).

Biomedical Engineer



Also known as Engineer - Biomedical

Biomedical engineers apply engineering and scientific methods to find solutions to problems in medicine and the life sciences.

Biomedical engineers:

- design new medical monitoring, diagnostic and therapeutic equipment
- set up and maintain medical equipment
- specify equipment for particular purposes
- test the safety, efficiency and effectiveness of equipment
- plan data processing services and the development of associated computing programs
- analyse new medical procedures to forecast likely outcomes
- participate in medical or scientific procedures where biomedical skills are needed
- design and deliver technology to assist people with disability
- analyse and design prosthetic and orthotic devices
- measure and monitor physiological systems
- diagnose and interpret bioelectric data using signal processing techniques
- provide computer analysis of patient-related data.

Biomedical engineers work in health care and must have a good theoretical and practical knowledge of engineering, a sound understanding of medical sciences and the ability to combine the two. Biomedical engineers usually work in multidisciplinary teams with other professionals, including anaesthetists, surgeons, physiotherapists, occupational and speech therapists and other medical specialists.

Personal Requirements

- Good communication skills
- Able to observe and take accurate measurements
- Patient and imaginative
- Aptitude for design
- Analytical and problem-solving skills

Education and Training

To become a biomedical engineer you usually have to complete an engineering degree at university with a major in biomedical engineering. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Most biomedical engineers are employed in public hospital-based engineering departments, by medical equipment vendors or by third-party service organisations. Some may be employed by firms involved in the development of medical devices and instruments and in the development or transfer of medical services technology. Biomedical engineers may also be employed in state and federal government departments and universities, and some are self-employed as consultants. Rehabilitation engineers are usually employed in rehabilitation centres.

Related Jobs

Electronics Engineer (p 140); Industrial Designer (p 104); Materials Engineer (p 143); Operating Theatre Technician (p 179); Prosthetist/Orthotist (p 206); Toxicologist (p 207).

Biotechnologist

Biotechnologists study plants, animals and microorganisms. They use this knowledge to develop uses for biological processes, which include creating products for pharmaceutical, agricultural, diagnostic and environmental use, and advancing industrial processes. Their work may incorporate the use of small molecule technologies, nanotechnology, bioinformatics and synthetic biology.

Biotechnologists:

- study the genetic, chemical, physical and structural composition of cells, tissues and organisms
- identify ways in which organisms and biological processes can be used to create new medicines, vaccines, foods, fuels and pharmaceutical products
- develop diagnostic tools to rapidly detect diseases
- use bacteria, enzymes and other organisms for a range of industrial uses, including agricultural production, food production and waste removal
- crossbreed animals and plants to encourage beneficial characteristics such as disease resistance, improved nutrition and accelerated environmental adaptation
- conduct research and experiments in the fields of genetic modification and biomolecular engineering, which involves altering the genetic make-up of plants and animals
- conduct human stem cell research with the aim of treating or preventing illnesses
- use biological engineering processes to create biological products for commercial use, such as biomaterials, chemicals or fuels.

Personal Requirements

- Enthusiasm and aptitude for science and research
- Able to think logically and analytically
- Able to carry out detailed and accurate work
- Good communication skills
- Able to solve problems and think creatively
- Able to work independently or as part of a team
- Able to grasp the ethics of scientific research involving humans

Education and Training

To become a biotechnologist you usually have to complete a degree in biotechnology or a degree in science with a major in one of the life sciences. You can also become a biotechnologist by completing a degree in chemical engineering with a major in any type of biological engineering. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry, biology, earth and environmental science, and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Biotechnologists are employed in federal, state, territory and local government organisations, including research organisations. They are also employed in private industry, hospitals, educational institutions, primary production and fisheries. Entry to some jobs is highly competitive. With appropriate qualifications and experience, biotechnologists may progress to running their own laboratory or move into a career in government relations, regulation, quality assurance or allied business services such as clinical trial development. Senior positions in the industry often require an honours, masters or doctoral degree, demonstrating a high level of competence in the laboratory.

Related Jobs

Agricultural Scientist (p 28); Agricultural Technical Officer (p 28); Aquaculture Technician (p 29); Biomedical Engineer (p 233); Chemist (p 235); Environmental Scientist (p 31); Food Technologist (p 237); Forester (p 34); Marine Biologist (p 241); Medical Scientist (p 203); Tissue Culture Technician (p 246); Toxicologist (p 207); Zoologist (p 338).

Botanist

Botanists study the biology of all types of plants to increase scientific knowledge and apply this knowledge in areas such as conservation and management of natural resources, agriculture, forestry, horticulture, medicine and biotechnology.

Botanists may:

- manage scientific collections of plant specimens
- document and analyse plant biodiversity and the evolutionary origins of plants
- investigate the effects of environmental factors such as rainfall, temperature, sunlight, soil, topography (surface features) and disease on plant growth
- grow plants under controlled conditions to assess the significance of environmental and genetic variables
- study the genetics of plants using biochemical and molecular techniques in a laboratory in order to determine the patterns of plant evolution
- study the nature of plant chromosomes, cells and tissues
- prepare scientific reports and papers
- work with other scientists to develop medicines and other products from plants
- search for and classify new species of plants
- identify plant specimens and prepare handbooks for plant identification
- use computers for information storage and analysis of data.

Botanists work in laboratories, offices and in the field, both alone and with other life scientists. They may work irregular hours and live in remote areas when carrying out research. Botanists may carry out fieldwork to collect and document plant species and numbers in particular areas. They may also be approached to advise on environmental and management issues and possible courses of action.

Personal Requirements

- Interested in plants and research
- Strong analytical skills
- Aptitude for working with computers
- Patient
- Enjoy working outdoors
- Able to work independently and as part of a team

Education and Training

To become a botanist you usually have to complete a degree in science with a major in botany, or forest or plant science. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry, earth and environmental science and physics are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Botanists are employed by universities and research organisations, as well as in the horticulture industry. Other major areas of employment include state, territory and federal government departments and organisations concerned with conservation, wildlife management, environmental control, fisheries, national parks, vermin and noxious weeds. There is growing employment with environmental consultancy firms, especially in the areas of mining and environmental restoration. Employment opportunities for botanists are influenced by levels of government and industry funding for environmental research and development, and community awareness of environmental and conservation issues. Demand for plant physiologists and plant pathologists is also influenced by trends in the horticultural and agricultural industries.

Related Jobs

Beekeeper (p 29); Biotechnologist (p 234); Forensic Scientist (p 237); Marine Biologist (p 241); Park Ranger (p 158); Winemaker (p 39).

Cartographic Technician

$1,838 | High skill | Stable

Also known as Cartographic Drafter

Cartographic technicians assist cartographers with the analysis of field survey and land management data, aerial photographs and other geographic information sources to prepare maps, plans, charts and diagrams.

Cartographic technicians:

- fit data into required mapping formats, using a variety of methods
- prepare, edit and revise plans, maps, charts and other drawings, manually or on computers
- prepare finished material for reproduction and publication.

Personal Requirements

- Graphic skills, with an interest in drawing and design
- Aptitude for working with computers
- Able to work neatly and accurately
- Normal colour vision.

Education and Training

To become a cartographic technician, you usually have to complete a VET qualification in surveying and spatial information services, spatial information services or surveying. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information. You may be able to study through distance education.

Employment Opportunities

Cartographic technicians may specialise in topographic maps, which display natural features and relief of land; cadastral maps, which show boundaries of owned land and properties; or thematic maps relating to geographic features.

Opportunities exist for graduates to work in both public and private sectors. Employers include mapping and geographic information agencies; mineral exploration, mining, planning and development companies; and city, town and shire councils. Cartographic technicians usually work as part of a team with other professionals and associates.

Some cartographic technicians upgrade their qualifications by completing a degree to become cartographers. There is an increasing trend for cartographic technicians to be self-employed contractors.

Chemist

$1,979 | Very high skill | Moderate

Also known as Chemical Scientist

Chemists study the physical and chemical properties of materials to determine their composition. They use this information to develop new materials and products, to devise more efficient processes for making materials and to increase scientific knowledge. Chemists should not be confused with pharmacists (see separate entry for Pharmacist).

Chemists:

- conduct experiments to identify chemical composition and study chemical changes that occur in natural substances and processed materials
- undertake research and analysis to develop and test theories, techniques and processes
- develop practical applications of experiments and research findings, including those combining new compounds for industrial, agricultural, veterinary and medical use
- test products and materials and prepare specifications and standards to ensure compliance with government health laws and quality standards
- undertake cost analysis, pricing and quality assurance exercises when developing new substances, processes and products
- take part in the marketing and financial management of substances, processes or products developed
- supervise and coordinate the work of technical support staff
- conduct routine analyses in a process environment.

Chemists may work alone or as part of a team of professionals and technicians. They work in laboratories, in the field or in chemical processing plants, offices and educational institutions. Depending on the type of laboratory, chemists may have to handle dangerous or hazardous materials. Protective clothing and equipment are usually provided.

Specialisations

- Analytical Chemist
- Environmental Chemist
- Geochemist
- Industrial/Production Chemist
- Organic Chemist
- Physical Chemist
- Research Chemist

Personal Requirements

- Enjoy scientific activities, including laboratory work, fieldwork and research
- Able to think logically and creatively
- Aptitude for accurate work
- Patient and able to persevere
- An inquiring mind
- Able to work independently or as part of a team

Education and Training

To become a chemist you usually have to complete a science or applied science degree at university with a major in chemistry. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, physics, chemistry and biology are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Students and graduates of a chemistry-related program may be eligible for membership of the Royal Australian Chemical Institute. For research and teaching positions, postgraduate qualifications may be required. Geochemists require tertiary training in earth science, as well as in chemistry.

Employment Opportunities

Chemists are employed in a wide range of government, industrial and university laboratories. They may work in hospital laboratories or with medical and scientific research bodies, food processing firms and pharmaceutical manufacturers. They also find employment as consultants, technical specialists, patent officers

and teachers. Chemists may specialise in developing new products or supervising production. With experience, they may progress to management positions.

Related Jobs

Biotechnologist (p 234); Forensic Scientist (p 237); Metallurgist (p 145); Microbiologist (p 243); Pharmacologist (p 216); Toxicologist (p 207).

Food Technician

Food technicians check production processes and product quality, and undertake maintenance and basic repair of equipment. They also assist food technologists with developing food products and establishing standards for production and packaging.

Food technicians:

- monitor food production processes
- carry out routine testing of food ingredients, packaging and food products to ensure that safety, quality, health and legal standards are met
- perform physical, chemical and microbiological tests, and report on content, nutritional value, flavour, aroma and appearance
- collect information from surveys and observations
- record test results and prepare graphs and reports
- assist food technologists with research and development, production technology and quality control
- mix, blend or cultivate ingredients to make reagents (agents to be used in chemical testing) or to manufacture food or beverage products
- develop, operate, maintain and repair equipment for use in food production, research and testing
- inspect, analyse and recommend ways of improving quality and efficiency of production
- check handling, processing and storage of raw materials
- check and maintain cleanliness and sanitation of laboratory equipment
- measure, test or weigh bottles, cans or other containers to ensure they meet specifications.

Personal Requirements

- Aptitude for mathematics and science
- Problem-solving skills
- Enjoy scientific activities
- Good observation skills
- Show initiative
- Able to work as part of a team
- Good organisation skills
- Strong attention to detail

Education and Training

To become a food technician you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you have a degree in food technology or food science and nutrition. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, biology, chemistry and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Initially, food technicians may perform routine quality assurance tasks such as laboratory testing. With experience, and sometimes further training, it is possible to advance to supervisory or senior technical positions such as quality control leader, quality compliance coordinator, quality assurance inspector, laboratory technician or quality improvement leader.

Job prospects are dependent on food production and access to export markets.

Related Jobs

Agricultural Technical Officer (p 28); Dietitian (p 171); Food Process Worker (p 295); Food Technologist (p 237); Laboratory Worker (p 240); Nutritionist (p 178); Primary Products Inspector (p 312).

Food Technologist

Also known as Food Scientist

Food technologists develop and improve existing food products and set standards for producing, packaging and marketing food. They use chemistry, microbiology, engineering and other scientific methods to study the process of food deterioration. They may specialise in fields such as meat, dairy, seafood, cereal products, confectionery, snack foods, beverages and minimally processed fresh produce.

Food technologists:

- ensure safe and hygienic conditions are maintained during processing, storage and packaging of food
- check raw ingredients and processed food for nutritional value, safety and quality
- undertake basic and applied research into aspects of food processing, food preservation, food quality, food deterioration, packaging, storage and delivery
- check foods for colour, texture and taste to ensure products meet government regulations and standards
- develop and ensure food standards
- demonstrate products to clients
- develop new products and devise the techniques needed to produce these foods and maintain quality during storage
- supervise cleaning and maintenance of machinery used in food processing
- compare products with those of other brands and participate in surveys that provide information to management about new products and market trends
- supervise the transportation of foodstuffs such as fruit, vegetables and milk, and inspect for spoilage and quality deterioration
- develop quality control procedures for the manufacture of products in plants or factories
- analyse results and experimental data
- supervise and coordinate the work of technicians.

Food technologists may be required to wear protective clothing.

Personal Requirements

- Enjoy scientific activities
- Able to take initiative
- Good problem-solving skills
- Aptitude for mathematics, science and technology
- Able to work as part of a team
- Strong reading and writing abilities
- Good observation and communication skills
- A high level of accuracy
- Good physical health

Education and Training

To become a food technologist you usually have to study nutrition, nutrition and dietetics, food science or food technology at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology and chemistry are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Food technologists may be required to obtain a Provide First Aid Certificate, and undergo a National Police Check and medical exam.

Employment Opportunities

Food technologists work in food, confectionery, wine and beverage manufacturing firms, in departments such as research, marketing and distribution, quality assurance, new product development and production, as well as in the research and development of food standards regulation. Additional opportunities exist with equipment manufacturers, flavouring and food ingredient businesses and in the retail sector.

Some food technologists are employed by government organisations such as the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and others work in state and territory government departments concerned with the quality of processed foods. Significant numbers find employment in large country centres near where foods are grown and processed.

Food technologists may undertake further study to gain employment as teachers or lecturers in VET and higher education institutions or as self-employed consultants to the food industry. Graduates of biochemistry, chemistry and microbiology may also find employment as food technologists.

Seafood technologists are employed in many areas of the fishing industry, including quality control, factory management, developing new products and training fishers in the correct handling of seafood.

Dairy technologists work for organisations that manufacture or sell dairy produce, marketing boards and dairy machinery manufacturers. Other dairy industry opportunities include advisory and control work in processing and distribution, grading and analysis, teaching and research.

Related Jobs

Agricultural Engineer (p 136); Agricultural Technical Officer (p 28); Biotechnologist (p 234); Dietitian (p 171); Food Technician (p 236); Laboratory Worker (p 240); Microbiologist (p 243); Nutritionist (p 178); Primary Products Inspector (p 312); Quality Assurance Inspector (p 314); Viticulturist (p 39).

Forensic Scientist

Forensic scientists apply scientific procedures and techniques to the examination of potential evidence that may assist in legal investigations.

Forensic scientists:

- identify illicit drugs
- analyse drugs and poisons in human tissue and body fluids, including blood alcohol results
- examine and compare materials such as fibres, paints, cosmetics, oils, fuels, plastics, glass, metals, soils and gunshot residues
- examine human and animal biological material to be compared with victims and suspects using DNA profiling
- conduct botanical identification of plant materials at trace levels and whole-plant identification (cannabis, for example)
- conduct document examinations, both physical (such as handwriting and typewriting) and chemical (such as analysis of inks and papers)
- analyse computers and obtain data from other electronic devices such as mobile phones
- examine crime scenes
- identify firearms and ammunition (forensic ballistics)

- detect, enhance, recover and identify latent fingerprints, footprints, tool marks, shoe marks, tyre marks and tracks
- examine fire and explosion scenes to establish the origin and cause
- improve the clarity of, and analyse, audio and video recordings
- produce reports, appear in court and present scientific and/or opinion testimony accurately and in a manner that is readily understood by the court
- present to a variety of audiences on the work of forensic scientists
- keep in contact with, and provide advice to, police investigators, legal practitioners, scientists and pathologists across a broad range of disciplines.

A wide range of expertise is required for forensic investigations. A forensic scientist may specialise in chemistry, biochemistry, molecular biology, botany, pharmacology, toxicology, crime scene examination, firearms examination, fingerprint or document examination.

Personal Requirements

- Good communication skills
- Able to remain unbiased in the examination of potential court evidence
- Meticulous and capable of clear, logical and lateral thinking
- Able to work as part of a team
- Initiative and motivation
- Able to persevere
- Good observation skills

Education and Training

To become a forensic scientist you usually have to study forensic science at university (preferably at honours level), followed by a postgraduate qualification in forensic science. You may also consider degrees in other relevant areas, which may provide entry into various areas of forensic science. Relevant areas include biology, botany, chemistry, physics, dentistry or medicine. To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry, physics and biology are normally required. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

A career in crime scene investigation, fingerprint identification or firearms examination may require entry into one of the state or territory police forces and completion of national training in the selected discipline. see the separate entries for Police Officer - State and Police Officer - Australian Federal Police for further details.

The main employers of forensic scientists are state and federal government health departments and state, territory and federal police forces. The Australian Federal Police, through its Forensic and Data Centres Division in Canberra, employs forensic scientists in the disciplines of crime scene examination, fingerprint identification, firearms and ammunition identification, document examination, forensic biology and forensic chemistry.

Related Jobs

Botanist (p 234); Chemist (p 235); Medical Laboratory Technician (p 177); Medical Practitioner (p 202); Medical Scientist (p 203); Microbiologist (p 243); Pharmacist (p 216); Pharmacologist (p 216); Toxicologist (p 207).

Geological Engineer

Geological engineers identify and try to solve problems involving soil, rock and groundwater, and design structures in and below the ground, using the principles of earth science. Geological engineering includes a number of ground engineering specialities such as geotechnical engineering, land remediation, rock mechanics, groundwater hydrology and engineering geology.

Geological engineers:

- investigate the engineering feasibility of planned new developments involving soil, rock and groundwater
- plan and undertake site investigations for proposed major engineering works such as bridges, dams and tunnels
- design measures to correct land contamination and salination
- design major structures in rock such as tunnels, basements and shafts
- perform computer analyses, use computer databases and generate computer-aided designs
- work out strategies to control landslides and areas of potential instability
- supervise the construction and performance of major engineering works involving excavation and/or exploration
- act as consultants or researchers, carrying out studies in any of the above fields of activity
- act in managerial positions and be responsible for coordination of multidisciplinary study teams, staff recruitment and matters of work organisation.

Outdoor work is an essential aspect of geological engineering investigations. Geological engineers typically spend up to half of their working hours on field investigations and supervising construction of their designs.

Personal Requirements

- Enjoy technical and engineering work
- Willing to adhere to safety requirements
- Able to identify, analyse and solve problems
- Good oral and written communication skills
- Aptitude for computing and design
- Practical and creative
- Able to work without supervision
- Able to accept responsibility
- Able to work independently or as part of a team
- Enjoy working outdoors, sometimes in remote locations

Education and Training

To become a geological engineer you usually have to complete a degree in engineering with a major in geoscience, geoengineering or geotechnical engineering. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Graduates may be eligible for membership of Engineers Australia, the Geological Society of Australia and/or the Australasian Institute of Mining and Metallurgy. Visit their websites for more details.

Employment Opportunities

Geological engineers are employed by engineering consulting firms; the civil, mining and environmental industries; and federal and state or territory government organisations. They may also work in areas of environmental consultancy and associated rehabilitation works. There are opportunities for promotion within companies and departments, or for self-employment.

Geological engineers may work with other professionals, pooling their expertise to solve particular problems. For example, they may work with environmental scientists, geologists and hydrologists on solving land degradation, groundwater and salination problems; with civil engineers in the design and construction of better transportation links; or with mining engineers in designing open-cut and underground mines, and on rehabilitation works on completion of mining.

Geological engineers have skills that are readily transferable between employers and may find work interstate or overseas.

Related Jobs

Metallurgist (p 145); Mining Engineer (p 145); Petroleum Engineer (p 147).

Geologist

Also known as Geoscientist

Geologists study the nature, composition and structure of the earth to locate materials and minerals, and to increase scientific knowledge. They also advise on the extraction of minerals, as well as on environmental protection, the rehabilitation of land after mining and on civil engineering projects.

Geologists:

- explore specific areas of the earth to determine its structure and the types of rocks or minerals that are present
- study rock cores, cuttings and samples
- study geostatistics and sampling theory
- study fossilised life forms and date rock strata
- study the nature and effects of natural events such as erosion, sedimentation, glaciation, earthquakes and volcanic hazards
- locate and manage groundwater resources, investigate groundwater contamination and land salinity
- undertake geochemical sampling of stream sediment and soils
- undertake ground or airborne magnetic, gravity and other geophysical surveys
- examine geological specimens in laboratories using optical and electron microscopes, X-ray diffraction and other electronic, chemical and mechanical techniques
- advise on determining the economic viability of extracting earth resources
- advise on the geological suitability of sites for structures such as tunnels, roads, coastal installations, bridges and water supply schemes
- contribute information about land use, planning and rehabilitation, and the effects of pollution on seabeds to environmental assessments
- use computers to integrate and interpret data sets of geological information
- prepare geological models to describe processes and predict future situations
- prepare geological reports and maps.

Geologists work in laboratories, offices and in the field. They may work independently or as members of a mixed team of professional and non-professional staff. They may have contact with the public, especially if needing permission to go onto private land. Fieldwork can involve spending time in remote desert, tropical or Antarctic/Arctic regions. The hours of work can be irregular and it may be necessary to spend long periods away from home.

Personal Requirements

- Enjoy technical and scientific activities
- Willing to adhere to safety requirements
- Able to work independently or as part of a team
- Able to prepare accurate records and reports
- Able to cope with the physical demands of the job
- Prepared to work outdoors in a range of environments and on irregular schedules

Education and Training

To become a geologist you usually have to complete a degree in science or applied science with a major in geology, geoscience, applied geology, geophysics or earth sciences. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry, earth and environmental science, physics and biology are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Formal training is followed by continuous vocational training throughout your working life to enhance skills in business, computing, management and technical knowledge.

After a qualifying period, graduates may be eligible for membership of the Geological Society of Australia, Australian Institute of Geoscientists and/or the Australasian Institute of Mining and Metallurgy.

Employment Opportunities

Geologists work for mining and petroleum companies involved in the exploration, extraction and production of minerals and hydrocarbons; geological, engineering and environmental consultancy firms; geological survey organisations; and state, territory and federal government departments.

Employment opportunities also exist in the securities industry and financial sector where geologists are employed as industry analysts and/or advise on the economic viability of particular mining projects.

Geologists may progress to exploration managers and company managers or directors. They are highly mobile, both within Australia and internationally. There are some opportunities for self-employment.

Related Jobs

Civil Engineer (p 138); Geological Engineer (p 238); Geophysicist (p 240); Hydrologist (p 36); Metallurgist (p 145); Mining Engineer (p 145); Natural Resource Manager (p 37); Petroleum Engineer (p 147).

Geophysicist

$2,192

Very high skill

Very strong

Geophysicists study the structure and composition of zones below the surface of the earth by taking measurements using seismic, gravity, magnetic and electrical data collection methods. The two main divisions of geophysics are exploration geophysics, which deals with the search for Earth's resources, and global geophysics, which uses the same techniques to study Earth as a whole and study earthquakes, magnetic fields and other phenomena. Geophysicists often specialise in areas such as seismology and seismic interpretation, borehole geophysics, mineral exploration, engineering geophysics, environmental or groundwater geophysics, or computer processing and software development.

Geophysicists:

- supervise the collection and processing of seismic data for petroleum exploration, and interpret and map prospects on which to drill a well
- plan, conduct and interpret geophysical surveys in exploring for mineral commodities such as gold, base metals, diamonds and coal using various electrical techniques and magnetic or gravity surveys
- design, develop and operate computer systems and software for processing and interpreting geophysical data sets
- plan, conduct and interpret geophysical surveys to locate and estimate quantities of recoverable groundwater reserves, the distribution and extent of salinity in agricultural areas or the extent of pollution in the ground or atmosphere
- carry out geophysical surveys of areas prior to the construction of major engineering structures such as dams, bridges or roads
- study earthquakes and earthquake risk, time variations and the distribution of the earth's magnetic and gravity fields, the physics of rocks and minerals, and fluid dynamics of molten rock (magma), oceans and atmosphere
- research new methods and instrumentation
- develop instrumentation for taking physical measurements in surveys, including gravity meters, magnetometers, seismic recorders, radiometric systems, and electrical, electromagnetic and radar transmitters and receivers
- develop mathematical models as an aid to interpreting geophysical survey results.

Geophysicists often work as part of a team of geoscientists. Some carry out fieldwork, which may involve a lot of travel, often to remote areas.

The two main divisions of geophysics are exploration geophysics, which deals with the search for Earth's resources, and global geophysics, which uses the same techniques to study Earth as a whole and study earthquakes, magnetic fields and other phenomena. Geophysicists often specialise in areas such as seismology and seismic interpretation, borehole geophysics, mineral exploration, engineering geophysics, environmental or groundwater geophysics, or computer processing and software development.

Personal Requirements

- Enjoy technical and engineering work
- Alert and analytical mind
- Enjoy applying physics and mathematics in practical ways
- Good oral and written communication skills
- Able to work independently or as part of a team
- Willing to work in remote areas

Education and Training

To become a geophysicist you usually have to complete a degree in science with a major in geophysics, geoscience or a combination of geology and physics, preferably at honours level. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry, physics and biology are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

The Australasian Institute of Mining and Metallurgy (AusIMM) website has a range of geoscience career and education information, including a list of recognised courses.

After a qualifying period, graduates may be eligible for membership with the Australian Institute of Geoscientists, the Australian Society of Exploration Geophysicists and AusIMM. Student memberships are available with the Australian Institute of Geoscientists and AusIMM.

Employment Opportunities

Most geophysicists are exploration geophysicists, employed by oil and mineral exploration companies. They are also employed by data processing centres, computer software development companies, environmental groups, state government geological survey teams, the Australian Geological Survey Organisation, the Australian Bureau of Mineral Resources, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and universities. There are some opportunities for self-employment as geophysical consultants.

Because the skills of geophysicists can be applied in other areas, alternative employment is available when activity in the mineral or petroleum industries declines.

Related Jobs

Mathematician (p 242); Mining Engineer (p 145); Petroleum Engineer (p 147).

Laboratory Worker

$1,500

High skill

Strong

Also known as Laboratory Assistant and Laboratory Technician

Laboratory workers assist scientists, engineers, technical officers and other laboratory staff by collecting and preparing samples, carrying out experiments, making measurements with scientific equipment, recording results and presenting them for critical analysis.

Laboratory workers:

- clean, maintain and set up equipment for use in experiments
- collect, classify and preserve specimens and samples
- water and observe plants, and feed and observe animals in laboratories
- perform diagnostic and other scientific tests on specimens (such as animal and plant tissues or food and water samples) in order to identify chemicals, minerals, cellular or other constituents, bacterial content and chemical contamination
- carry out experimental procedures and monitor processes
- inspect and test animals and plants for diseases
- perform routine mathematical calculations and prepare graphs
- carry out routine quality assurance checks on production line samples and materials.

Laboratory workers work in the field, on the process-production line and in the laboratory. They may work in a team or alone.

Depending on the type of laboratory, they may handle dangerous or hazardous materials. Safety awareness and compliance with regulations is important. Protective clothing and equipment is usually provided.

Personal Requirements

- Enjoy scientific activities
- Able to produce accurate and detailed work
- Able to work as part of a team

Education and Training

To become a laboratory worker you usually have to complete a traineeship in Laboratory Skills or Laboratory Techniques. Entry requirements may vary, but employers generally require Year 10. For more details, see Section 2. Ask your career adviser about the possibility of starting some of this training in school.

You can also become a laboratory worker by completing a VET qualification in laboratory skills, laboratory techniques or laboratory technology. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Employment Opportunities

Laboratory workers usually work under the direction of scientists in fields such as dairy production, food preservation research, entomology, plant pathology, botany, seed production, agricultural chemistry, biochemistry, pathology, artificial insemination, wine production, minerals and chemical industries, science equipment manufacturing, plastics and occupational health.

Laboratory workers are also employed in breweries, chemical manufacturers, food and beverage manufacturers, government agencies, hospitals, museums, textile manufacturers, schools, universities and a wide range of other industries.

Related Jobs

Animal Attendant (p 335); Animal Technician (p 232); Aquaculture Technician (p 29); Chemical Plant Operator (p 283); Food Technician (p 236); Food Technologist (p 237); Medical Laboratory Technician (p 177); Quality Assurance Inspector (p 314); Veterinary Nurse (p 338).

Marine Biologist

$1,794 | Very high skill | Moderate

Marine biologists study the origin, structure, functions and behaviour of all forms of life in the sea and connected estuaries, rivers and lakes, as well as their relationships with each other and the environment.

Marine biologists:

- estimate the number of marine organisms and analyse their population features
- observe communities of marine organisms and determine the factors influencing their structure
- assess and advise on the causes, effects, prevention and control of introduced species
- use numerical and statistical skills to design laboratory and field experiments
- design and carry out environmental impact assessments to determine whether change is caused by natural or human factors
- participate in studies aimed at predicting the effects of proposed developments
- develop long-term programs for monitoring environmental pollution
- provide guidance to help manage fisheries
- provide information and recommendations for the development of marine conservation and harvesting policies and programs, including aquaculture
- write scientific reports on research and investigations, and prepare more general information for scientific, managerial, political and general audiences
- provide advice to managers, politicians, primary producers, healthcare workers and the general public
- provide research training for students and staff seeking entry to this field.

Marine biologists may be required to work both in a laboratory and for extended periods at sea or on shore-based field stations. Fieldwork may include working on commercial fishing vessels, on small inshore vessels or scuba diving.

In many cases, much of the work of marine biologists involves office work, research, writing reports and long hours in laboratories.

Specialisations

- Marine Ecologist

Personal Requirements

- Interested in the marine environment and its inhabitants
- Analytical and problem-solving ability
- Good written communication skills
- Good mathematics skills
- Able to work as part of a team

Education and Training

To become a marine biologist you usually have to study marine or environmental biology, marine science, marine environment or a related field at university. You may also consider major streams that emphasise marine biology, such as aquaculture. To get into these courses you usually need to gain your Senior Secondary Certificate

of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry, earth and environmental science, biology and physics are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Bachelor of Science
Find solutions to tomorrow's challenges
Only when you understand how something works can you improve it.
Harness the latest scientific thinking and innovations to make a real difference.
study.unimelb.edu.au
POSTERA CRESCAM LAUDE
THE UNIVERSITY OF MELBOURNE
CRICOS 00116K

Employment Opportunities

Marine biologists are employed by state, territory and federal government departments such as the Commonwealth Scientific and Industrial Research Organisation (CSIRO), the Australian Institute of Marine Science (AIMS), resource and environmental departments, as well as universities and museums. Some marine biologists also work in the aquaculture and fisheries industries or in environmental consulting firms.

Job opportunities depend on the level of funding for marine research from governments and private industry, the occurrence of marine ecological problems and community awareness of environmental and conservation issues.

Related Jobs

Botanist (p 234); Environmental Scientist (p 31); Fisheries Officer (p 33); Microbiologist (p 243); Pharmacologist (p 216); Toxicologist (p 207); Zoologist (p 338).

Mathematician

Mathematicians apply and develop mathematical principles to solve problems in all areas of the sciences, technology, social sciences, business, industry and commerce.

Mathematicians:

- apply geometry and calculus to design objects in fields such as architecture, computer graphics and robotics
- analyse statistics to find predictive models for traffic flow, insurance risks, consumer research, market analysis and clinical trials
- develop predictive models for financial markets and products for financial risk management
- simulate processes in chemical, mining or agricultural industries by translating them into mathematical models
- develop computer modelling
- develop and improve mathematical models
- design computer programs to make and break complex security codes, or investigate and develop schemes for information security.

Personal Requirements

- Enjoy mathematics
- A good imagination
- Analytical skills
- Able to take initiative
- Able to persevere
- Able to work independently or as part of a team
- Enjoy problem-solving

Education and Training

To become a mathematician you usually have to study mathematics at university. There are a number of different degrees within which you can study mathematics. These include arts, engineering and science. Mathematics can also be studied at some universities as part of a double degree with other courses such as law, medicine, actuarial studies and finance. Mathematics and statistics are closely related areas and many students combine study in both.

To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry, physics and biology are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Mathematicians are employed in a wide range of capacities, such as scientists, top-level and mid-level managers, executives and administrators, academics and research personnel in universities, teachers, computer systems analysts and developers, and in the finance sector. They are in demand in ever-increasing areas where mathematical models are used, such as in insurance models in the finance industry, econometric models in government departments and models related to the physical sciences. The Commonwealth Scientific and Industrial Research Organisation (CSIRO), the Defence Science and Technology Organisation and other government bodies also employ mathematicians. Additionally, there is nearly always demand for teachers of mathematics, particularly in secondary schools.

Related Jobs

Accountant (p 50); Actuary (p 50); Analyst (Information Technology) (p 80); Astronomer (p 232); Bank Officer (p 53); Business Systems Analyst (p 54); Economist (p 56); Electrical Engineer (p 139); Geophysicist (p 240); Intelligence Analyst (p 156); Mechanical Engineer (p 143); Meteorologist (p 242); Mining Engineer (p 145); Programmer (Information Technology) (p 86); Research Officer (p 244); Teacher - Primary (p 128); Teacher - Secondary (p 129).

Meteorologist

Also known as Weather Forecaster

Meteorologists forecast the weather and study the atmosphere to improve the understanding of climate.

Meteorologists:

- use and develop scientific techniques to forecast and interpret atmospheric conditions
- analyse and interpret surface, upper-level and other measurements (including satellite images and other remote sensing data about atmospheric conditions)
- prepare weather forecasts for the public as well as specific users such as aviation, marine, defence and emergency services
- issue warnings for cyclones, storms, gales, floods, frosts and fire danger
- study climate and identify climatic change
- work with physicists and engineers to develop observation equipment and distribute information on topics such as air pollution
- supervise and coordinate the work of other meteorologists, technical officers and meteorological observers
- carry out weather studies for particular clients.

Meteorologists in forecasting positions usually work in shifts. Operational meteorologists may work in field station locations throughout Australia and its territories, from the tropics to Antarctica. Others are involved in policy development, administration and training.

Personal Requirements

- Enjoy and have aptitude for science (especially physics) and mathematics
- Flexible and resourceful
- Interested in the provision of meteorological services to the community

Education and Training

To become a meteorologist you usually have to study atmospheric science, mathematical and computer sciences, mathematics and statistics, ocean and climate sciences or physics at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry, biology, earth and environmental science, and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Successful applicants with the Bureau of Meteorology (BOM) must complete a nine-month specialised training program at the BOM Training Centre in Melbourne before being posted to one of the regional or field offices throughout Australia. Once they have completed their training, graduates receive a Graduate Diploma in Meteorology.

Australian citizenship, or the eligibility to apply for Australian citizenship, is required for employment with BOM.

Employment Opportunities

The Bureau of Meteorology (BOM) is the major employer of meteorologists. A few positions are occasionally available in private companies, the Commonwealth Scientific and Industrial Research Organisation (CSIRO), universities and state or territory government bodies (mainly environmental agencies).

Most meteorologists are employed in capital cities, but some are employed at major airports and Royal Australian Air Force (RAAF) bases outside capital cities and further afield (Antarctica, for meteorological consultants and practitioners who provide a private consultancy service to engineers and architects.

Competition for the few positions offered each year is very strong. Holding a higher degree qualification may be an advantage. Those who successfully complete BOM's training course are employed in the bureau's head office in Melbourne or in a capital city regional forecasting centre. Subsequent promotion is based on ability and on positions becoming available. Vacancies are usually advertised on the BOM website, online job websites and through universities during March and April for training courses that commence in late January/February.

Related Jobs

Mathematician (p 242).

Microbiologist

Microbiologists study microscopic forms of life such as bacteria, viruses, protozoa, algae and fungi to increase scientific knowledge and develop medical, veterinary, industrial, environmental and other practical applications.

Microbiologists:

- develop products, such as antibiotics, detergents or cosmetics
- test samples from patients, isolating and identifying the microbes that cause illness
- prevent and control the spread of harmful microbes in hospitals, the food industry and the general population
- advise the government about public health policies
- examine natural products
- investigate the potential of microbes to improve human and animal health through nutrition
- develop and improve fermented drinks and foods
- research the microbiology of plants
- study DNA and the use of bacteria to introduce specially engineered genes into an organism
- use their knowledge of microbiology to minimise environmental impact
- investigate the ways in which microorganisms can be used to improve and enhance products

Personal Requirements

- Enjoy and have aptitude for science and research
- Able to think logically and analytically
- Able to carry out detailed and accurate work
- Able to think creatively and solve problems

Education and Training

To become a microbiologist you usually have to complete a degree in science, biomedical science, medical science or health science at university with a major in microbiology. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Employment Opportunities

Microbiologists are employed in federal, state, territory and local government organisations, including research organisations and hospitals. They are also employed in the private sector in a wide range of industries, such as agriculture, food production, private pathology and pharmaceuticals.

Related Jobs

Biochemist (p 233); Biotechnologist (p 234); Chemist (p 235); Environmental Scientist (p 31); Food Technologist (p 237); Forensic Scientist (p 237); Marine Biologist (p 241); Medical Practitioner (p 202); Medical Scientist (p 203); Tissue Culture Technician (p 246); Veterinarian (p 337); Zoologist (p 338).

Physicist

Physicists study the behaviour of the physical world at the most basic level and find practical ways to apply new knowledge gained from their research in areas of science and technology.

Physicists are usually identified within three broad roles:

• theoretical physicists, who develop theories or models of how particular aspects of the world work

• experimental physicists, who test these theories, determining their limits and suggesting new approaches to them

• applied physicists, who apply these findings in practical settings, such as within industry and through the introduction of new technology.

There is interaction between all three roles and physicists generally have skills in each of these areas.

Physicists:

- observe and measure phenomena in the physical world, from the smallest subatomic particle through to the universe as a whole
- propose theories and models to explain phenomena
- use computers to explore the consequences of theories and models

- build equipment to make new types of measurements, which in many cases have never been attempted before
- create new ways of understanding observations that have been made
- develop new materials, products and processes for use in industry, medicine, defence and other areas of research and development.

Specialisations

- Astrophysicist
- Atmospheric and Environmental Physicist
- Atomic and Molecular Physicist
- Condensed Matter Physicist
- Cosmologist
- Medical Physicist
- Nanotechnologist
- Nuclear/Particle Physicist
- Optical Physicist

Personal Requirements

- Aptitude for analysis and problem-solving
- Enthusiasm for research
- Aptitude for mathematics and computing
- Able to visualise and explain ideas clearly
- Able to work independently or as part of a team

Education and Training

To become a physicist you usually have to complete a degree in science or applied science at university with a major in physics, astrophysics, nanoscience, nanotechnology or photonics. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry, earth and environmental science and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Physicists are employed in universities, laboratories and government organisations such as the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Defence Science and Technology Organisation (DSTO), Australian Nuclear Science and Technology Organisation (ANSTO), Australian Antarctic Division and Bureau of Meteorology (BOM). Physicists also work in private industry, hospitals, schools and small high-tech companies.

They may work as research scientists, medical and health physicists, meteorologists, technologists, scientific programmers, technical salespeople, geophysicists, technical managers, health scientists and teachers.They may also be employed in areas where they are responsible for sophisticated equipment, such as bioscience and space science, or in areas such as paper manufacturing or minerals exploration, or high-tech equipment sales.

Many physicists hold an honours or higher research degree, such as a PhD, and employment and promotional opportunities often depend on the qualification gained. Research positions are highly sought after and a PhD obtained by research in a branch of physics is usually required for these jobs. Much of physicists' training is concerned with the development of advanced skills in analytical and problem-solving techniques, which are valuable in many other fields of employment, including management and administration, financial modelling, instrumentation, industrial research and development, and modelling in other scientific fields.

Related Jobs

Astronomer (p 232); Geophysicist (p 240); Materials Engineer (p 143); Mathematician (p 242); Meteorologist (p 242).

Research Officer

Research officers plan and conduct research into a variety of issues or areas.

Research officers:

- contact members of the public, organisation representatives or special interest groups to gather information
- conduct research using a variety of sources, including the internet, journals and publications or other relevant literature
- collate and write up the results of their research for statistical or publication purposes
- collect and analyse biological, meteorological or other types of data or samples for scientific study
- study long-term and short-term trends in population growth and health, in the areas of biological, medical and health research
- study the behaviour of animals for the purposes of zoological research
- study economic or social trends in order to assist development with the policy
- perform administrative, record keeping or statistical tasks related to research
- pursue funding for further research.

Research officers can work in a wide variety of research fields, including medical, biological, educational, social, academic, economic, mathematical, legislation and human rights, human resources, business operations, the arts and creative arts, exploration and mining, communications technologies, logistics, information sciences, operations and political areas.

Specialisations

- Operations Researcher

Personal Requirements

- Enthusiasm for research
- Able to analyse and collate information
- Good oral and written communication skills
- Able to work as part of a team
- Able to manage workload and meet deadlines
- Good organisational skills
- Proactive

Education and Training

To become a research officer you usually have to complete a degree with a major that is relevant to the field in which you wish to conduct research. Research can be conducted into any field of learning but you could consider studies in arts, biology, economics, Indigenous studies, mathematics, medicine, political science, science and geology. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Research officers are employed by federal, state and territory government departments and organisations as well as trade

unions, political parties, universities and non-profit organisations. Some work in the private sector for organisations that provide consultancy services to other organisations.

Employment prospects for research officers are affected by the level of funding available in their chosen areas. With experience and sometimes further training, promotion to managerial positions is possible.

For more information about joining the public service, see the separate entries for Public Servant - Australian Public Service and Public Servant - State Government.

Related Jobs

Librarian (p 188); Mathematician (p 242); Public Servant - Australian Public Service (p 163); Public Servant - State Government (p 163); Sociologist (p 190); Statistician (p 245); University Lecturer (p 132); Writer (p 191); Zoologist (p 338).

Science Field Officer

Science field officers perform support functions in the field by making observations, collecting and analysing samples, recording information, and looking after the practical tasks involved in maintaining a remote field operation, or operating a city-based office, laboratory or workshop. They may specialise in a number of different areas, such as agriculture, environment, forestry, geoscience and marine science.

Science field officers:

- order, check, pack and ship equipment and supplies for field surveys
- manage or maintain small field camps
- mark outlines of ore, waste and drillhole patterns in operating mines
- collect, record and transport samples of rock, soil, plants, water or other materials
- sort information collected from a range of samples and carry out computer processing of the data
- assist with all aspects of supporting personnel in the field
- operate and maintain collections and a wide range of equipment (mechanical, electrical, computing).

Science field officers may be required to spend long periods working in remote locations throughout Australia and overseas, but may also work in exclusively city-based operations.

Personal Requirements

- Enjoy scientific activities
- Able to prepare accurate records and reports
- Able to work as part of a team
- Able to cope with the physical demands of the job
- Willing to work in remote locations

Education and Training

To become a science field officer you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you have a degree in science at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

A current drivers licence is usually required. In addition, applicants may need to be 18 years of age or older and hold a Provide First Aid Certificate.

Employment Opportunities

Science field officers may work for mining and exploration companies, engineering and construction firms, and environmental organisations. Some science field officers may also work for government agencies in a variety of science areas.

Science field officers may progress to such roles as technical assistants and technical officers. They may also be involved in laboratory work. Many officers work on a contract basis as demand is seasonal. Job opportunities also largely depend on the level of activity in scientific research. Competition is very strong for available entry-level positions.

Related Jobs

Agricultural Technical Officer (p 28); Laboratory Worker (p 240).

Statistician

Statisticians design and apply statistical techniques for creating, collecting and analysing data to draw conclusions, inform decision-making and direct policy within areas such as science, technology, medicine, education, business, finance and government.

Statisticians:

- define precisely what is to be measured and decide which information to collect and from where
- determine the size of the sample to be tested and how the sample will be selected
- decide on the best method of collecting the information, whether by mail-out of questionnaires, experiments or survey interviews (telephone or face-to-face), and create associated measurement tools
- ensure measurement resources are used efficiently
- interpret data and produce relevant statistics to describe or infer particular trends and patterns
- model and predict trends for phenomena such as accidents, pollution, disease outbreaks and economic trends
- check the validity and reliability of statistical models used in applications
- fit models using statistical computing environments and packages and develop, code and run statistical computer programs
- design experiments and trials to test new methods and products
- evaluate the accuracy of the obtained information, represent data graphically and report findings.

Statisticians may work by themselves, but they usually work in a team. The team may include specialists from various fields, as well as clerical and computing staff involved in data collection and analysis.

Specialisations

- Epidemiologist

Personal Requirements

- Aptitude for analysis and research
- Good at mathematics
- Good reasoning and problem-solving skills

- Good communication skills
- Able to work independently or as part of a team

Education and Training

To become a statistician you usually have to study mathematics, econometrics or statistics at university. These areas of study may be undertaken within a mathematics, actuarial studies, arts, business, commerce, computer science, economics or science degree, depending on the mathematical and statistical emphasis of subjects taken. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, chemistry, biology and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Statisticians are employed in a wide variety of fields, including financial institutions, pharmaceutical companies, technology companies, large industries and major corporations. They also work in federal government departments, such as the Australian Bureau of Statistics (ABS) and the Commonwealth Scientific and Industrial Research Organisation (CSIRO). Depending on individual interests, statisticians work within both private and public sectors. Some work as statistical consultants to medical facilities (both research and clinical) and financial services organisations, such as superannuation funds, managed funds or major industries. It is also possible to find work with non-government organisations and research institutes. Most statisticians work in major cities. Advancement to supervisory and higher management positions is possible for experienced and well-qualified statisticians.

Related Jobs

Actuary (p 50); Economist (p 56); Market Researcher (p 73); Mathematician (p 242); Research Officer (p 244).

Tissue Culture Technician

$1,794 | Very high skill | Moderate

Tissue culture technicians use various techniques to asexually reproduce live tissue, under laboratory conditions, producing specimens that are genetically identical to, or different from, the parent tissue. The process of producing genetically identical specimens is commonly known as cloning. Tissue culture is used for a wide variety of commercially important agricultural and horticultural plants, in the propagation of rare and endangered plant species, and in the growth of tissues or cells used in health and medical research and treatments.

Tissue culture technicians:

- clean, sterilise and maintain equipment and facilities
- set up and operate equipment, including microscopes, environmental chambers (incubators) and centrifuges
- select live material with the desired characteristics
- dissect and test tissues or cells for viruses and other diseases
- prepare selected tissues or cells for reproduction
- prepare reproductive and growth chemical solutions (medias) suitable for the species to be cloned
- chemically treat selected tissues or cells to induce genetic mutations
- place tissues or cells in sterile chemical solutions or medias and place on shakers to initiate reproduction or growth
- place reproduced plant material in sealed sterile containers containing a nutrient gel, then grow under controlled temperature and light conditions, repeating this process until the specimens are of sufficient size
- grow samples of cloned cells or organisms to maturity and monitor them for desirable or undesirable genetic mutations (genotypes) or characteristics (phenotypes)
- record results by using computers or other methods.

Tissue culture technicians mostly work in laboratories, with a small amount of field and shadehouse work.

Personal Requirements

- Good eyesight (may be corrected)
- Good hand-eye coordination
- Able to concentrate on detail
- Able to keep records accurately

Education and Training

You can work as a tissue culture technician without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have qualifications and you may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.You can also become a tissue culture technician through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Employment opportunities exist in universities and in federal, state and territory government organisations, as well as with private agricultural/horticultural firms and medical research laboratories and institutions. Job prospects depend on the level of government funding, the extent of private sector research, and competition from people with degrees trying to enter the field by starting as a technician.

Related Jobs

Biotechnologist (p 234); Microbiologist (p 243); Pharmacologist (p 216); Toxicologist (p 207).

Social work

If you enjoy helping others with personal and social problems, a career in social work may be for you. Courses teach students to understand, analyse and develop strategies to help people facing a variety of problems and challenges. These issues may include homelessness, domestic violence, alcohol and drug addiction, sexual assault or child abuse.

Courses and specialisations

Courses in this field fit into one of two groups — an undergraduate degree with no prior study or a two-year course taken after completing two years of related tertiary study. In recent years, there has been a move to expand the skills of social work graduates by offering the courses combined with related fields such as psychology, social science and law. The diverse areas of specialisation that social workers can choose from may include family, youth and child welfare services; medical and health services; psychiatric and general mental health services; disability services; juvenile and family law courts; aged care; income support; and mediation.

Where to study

Social work degrees are offered at numerous universities and campuses in all states and territories, typically involving four years of full-time study. They are not generally difficult to get into, but some may have stricter criteria for entry than others.

Five-star universities

Educational experience

NOTRE DAME	87.5%
TORRENS	84.9%
ACU	84.2%
SUNSHINE COAST	83.8%
ECU	82.5%
NEWCASTLE	81.8%

National average
77.2%

Graduate employment

CSU	85.8%
DEAKIN	84.7%
CURTIN	84.1%
CQUni	83.0%
WOLLONGONG	81.3%
JCU	80.8%
CDU	80.6%

National average
71.7%

Learner engagement

NOTRE DAME	75.0%
CURTIN	70.7%
ACU	70.1%
NEWCASTLE	68.4%
VU	67.2%
TORRENS	66.7%

National average
53.2%

Learning resources

UniSQ	91.3%
ECU	89.8%
SOUTHERN CROSS	89.7%
SUNSHINE COAST	89.0%
FLINDERS	88.8%
NEWCASTLE	87.5%
UniSA	87.5%

National average
78.9%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

11,860
Undergraduate

7,934
Postgraduate

903
International undergraduate

What can I do?

- School counselling
- Hospital work
- Community work
- Health work
- Government work

Graduate starting salary

$52,100
Undergraduate

$55,800
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

71.7%
Undergraduate

79.8%
Postgraduate

Five-star universities

Median starting salary

UNE	$62,900
FEDERATION	$61,700
CDU	$59,700
SUNSHINE COAST	$59,400
JCU	$58,500
GRIFFITH	$58,400

National average
$52,100

Skills development

NEWCASTLE	94.5%
NOTRE DAME	93.8%
TORRENS	92.7%
WOLLONGONG	92.5%
SOUTHERN CROSS	90.2%
ACU	89.8%
CQUni	89.6%

National average
85.8%

Student support

TORRENS	87.4%
NEWCASTLE	83.4%
SUNSHINE COAST	82.3%
UNE	80.6%
FEDERATION	80.2%
CQUni	79.6%
NOTRE DAME	79.6%

National average
75.3%

Teaching quality

NOTRE DAME	95.3%
ACU	89.8%
TORRENS	88.9%
UNSW	86.0%
NEWCASTLE	84.9%
SUNSHINE COAST	84.8%

National average
82.7%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Child Carer

Child carers play a crucial role in providing care, guidance and support to children in various settings. They ensure the safety, wellbeing and development of children, fostering a nurturing environment where they can thrive and reach their full potential.

Child carers:

- provide a safe and secure environment for children
- ensure their physical, emotional and social wellbeing
- plan and implement age-appropriate activities and educational programs
- assist with daily routines, including mealtime, naptime and toileting
- monitor and document children's progress and behaviour
- collaborate with parents and families to promote holistic development.

Child carers work in diverse settings, including childcare centres, preschools, family day care and private homes. Key aspects of their working conditions include flexible working hours, including early mornings, evenings and weekends. There would also be physical demands, such as lifting, bending and standing for extended periods. Child carers might collaborate with a team of educators, parents and professionals.

Specialisations

- Early childhood education
- Special needs care
- In-home childcare
- Indigenous childcare

Personal Requirements

- Genuine love and passion for working with children
- Patience, empathy and a nurturing nature
- Strong communication and interpersonal skills to engage with children and their families
- Ability to create a safe and stimulating environment
- Adaptability and flexibility to meet the unique needs of each child
- Physical stamina to keep up with the demands of the job

Education and Training

While formal education requirements may vary, the following qualifications and training are commonly sought after by employers: Certificate III or Diploma in Early Childhood Education and Care; first Aid and CPR certification; Working with Children Check and national police clearance. You'd also have additional training in child development, behaviour management and safety.

Employment Opportunities

Child carers have a range of employment opportunities across Australia — there is a growing demand for quality childcare services due to changing workforce dynamics. They would find employment in childcare centres, preschools, kindergartens and family day care, and potentially in community organisations, schools or as a private nanny. There are also opportunities for career progression to supervisory or management roles.

Community Worker

Also known as Community Development Officer and Community Engagement Officer

Community workers encourage and assist community groups to identify their needs, participate in decision-making and develop appropriate services and facilities to meet those needs.

Community workers:

- assist community groups in planning, developing, maintaining and evaluating community resources, programs and support networks
- support, develop and evaluate strategies that encourage community participation in activities
- research, analyse and assist council, town planning, corporate planning and environmental health departments in developing community service policies
- communicate frequently with community groups, welfare agencies, government bodies, non-government organisations and private businesses about community services such as housing, health, welfare and recreation
- monitor, evaluate and recommend changes to community development programs, policies, practices or budgets
- help raise community and public awareness regarding issues such as welfare rights by promoting, organising and helping to coordinate meetings and seminars
- carry out administrative work, which may include written correspondence, preparing submissions and reports for government bodies or other agencies and attending management meetings.

The work of community workers involves considerable personal contact and travel within communities. They are normally expected to attend evening meetings and occasional weekend activities.

Specialisations

- Aboriginal Affairs Administrator

Personal Requirements

- Enjoy assisting people
- Able to work independently
- Able to work in cooperation with others
- Good work organisation and time management skills
- Able to relate to people effectively and patiently
- Able to manage and help resolve conflict
- Able to understand the issues and interests of the communities involved
- Good oral and written communication skills

Education and Training

To become a community worker you usually have to complete a VET qualification in a relevant discipline such as community services or community development. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information. You can also become a community worker by studying a relevant field at university. Entry to relevant degree courses usually requires you to gain your Senior Secondary Certificate of Education.

For more information, see the separate entries for Aboriginal and Torres Strait Islander Health Worker, Social Worker, Welfare Worker and Youth Worker. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

To become a member of the Australian Community Workers Association (ACWA) you need to complete an approved degree or two-year diploma in community services work, human services community welfare, community development or a similar discipline that is approved by ACWA. Contact the association for further information and a current list of approved courses. A Working with Children Check and National Police Check may also be required.

Employment Opportunities

Community workers work with groups of people in various settings, including aged care, youth and community centres, youth shelters, centres for people with disability, and Aboriginal communities. They also work for local councils and for the family and community service agencies of state and territory governments. Many community workers move on to self-employment and undertake contract community work on specific projects. Community workers may work in urban or remote areas. Employment prospects depend on the level of government funding for community organisations and the number of programs to be conducted and administered.

Related Jobs

Aboriginal/Torres Strait Islander Health Worker (p 167); Aged Care Worker (p 167); Health Promotion Practitioner (p 174); Social Worker (p 250); Youth Worker (p 251).

Social Worker

Social workers help people to deal with personal and social problems, either directly or by planning or carrying out programmes that benefit groups or communities. They are interested in challenging the structural barriers that contribute to inequality, discrimination, exploitation and oppression within communities.

Social workers can specialise in a range of different practice areas such as children and family, youth, violence and sexual assault, medical and health, child protection, income support, disability, education, aged care, correctional services, family law, youth justice, community legal, psychiatric and general mental health, refugees and migrants, and Indigenous communities.

Social workers:

- provide counselling and support through a crisis that may be due to death, illness, relationship breakdown or other reasons
- provide clients with information about services that can assist them
- provide letters of referral or reports that will help clients to obtain other services such as crisis accommodation or social security benefits
- guide small groups of people to share their experiences, support each other and learn social skills
- assist community groups to plan and carry out programs to help themselves (assisting newly arrived immigrants to form an association, for example)
- research community problems, needs and solutions through client contact and records of welfare and health agencies
- analyse statistics and write reports
- develop policy and evaluate programs
- manage and train staff
- attend professional meetings
- lobby to change social welfare policies and procedures in the pursuit of social justice for all members of the community.

Personal Requirements

- Emotional maturity
- Keen analytical abilities
- Able to view other people's problems objectively
- Good organisational and communication skills
- Able to work independently or as part of a team
- Commitment to social justice

Education and Training

To become a social worker you usually have to complete a degree in social work at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Before undertaking professional placements required by courses, students will need to obtain a National Police Certificate, a Provide First Aid Certificate and immunisations, and undergo a Working with Children Check. Contact the institutions you are interested in for more information.

Employment Opportunities

Social workers are employed in a variety of community and social welfare fields and may work in state, territory and federal government departments; hospitals; community health centres; local government authorities; or non-government organisations. Some social workers are self-employed, working as counsellors, therapists and consultants.

With their broad academic and practical training, qualified social workers may also work in non-social work areas as project officers, policy makers, managers or administrators.

Related Jobs

Art Therapist (p 94); Counsellor (p 170); Education Aide (p 123); Funeral Attendant (p 297); Probation and Parole Officer (p 162).

Welfare Worker

Welfare workers work with individuals, families, groups and communities to improve quality of life by empowering, educating and supporting people and by helping them to change their social environment. Some specialise in helping families, adolescents, people with substance abuse issues, homeless people, people with disability, people escaping domestic violence, victims of crime or criminals.

Welfare workers:

- provide support and assistance to clients who experience difficulties such as marital problems, unemployment, illness or drug abuse
- arrange for clients to be referred to appropriate specialists or community agencies
- help clients with long-term problems to bring about self-directed change in their lives
- assess risks and provide intensive short-term crisis counselling for victims of domestic violence or child abuse
- help to establish or administer neighbourhood houses or community groups
- evaluate data and write reports, including submissions requesting funding for continuing programs and new projects

- act on behalf of clients who have a complaint against an organisation or government department
- arrange and evaluate support services, such as Meals on Wheels delivery to elderly people living alone
- recruit, train and coordinate volunteer staff
- assist community groups to identify and implement strategies to deal with local issues.

Welfare workers deal with situations which may involve emotional, social and financial difficulties. Welfare workers can work individually or as part of a team. They may work in an office, visit clients in their homes and attend evening community meetings.

Personal Requirements

- Able to communicate effectively with a wide range of people
- Tolerance and an open mind
- Good planning and organisational skills
- Able to take initiative
- Sense of responsibility
- Able to deal with conflict in stressful situations
- Commitment to human rights and social justice

Education and Training

To become a welfare worker you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you complete a degree specialising in human services, community welfare, community development or a related discipline. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

To become a member of the Australian Community Workers Association (ACWA) you need to complete an approved degree or two-year diploma in community services work, human services community welfare, community development or a similar discipline that is approved by ACWA. Contact the association for further information and a current list of approved courses. You will need to undergo a Working with Children Check and a check for working with vulnerable people.

Employment Opportunities

Welfare workers are employed by state, territory and federal government departments; local councils; hospitals and health centres; unions; industry; non-government organisations; and community groups. Increasing numbers are self-employed in private practice or as consultants. Welfare workers may be employed as fieldworkers, project officers, program coordinators, community health workers, student or staff counsellors, or human services workers. Some welfare workers are employed in supervisory, administrative or policy-making roles. Demand for this occupation is largely influenced by government funding in the social welfare field.

Related Jobs

Aboriginal/Torres Strait Islander Health Worker (p 167); Aged Care Worker (p 167); Community Worker (p 249); Disability Support Worker (p 172); Health Promotion Practitioner (p 174); Public Servant - Australian Public Service (p 163); Social Worker (p 250); Teacher - Early Childhood (p 125); Teacher - English as a Second Language (p 126); Youth Worker (p 251).

Youth Worker

Youth workers work with and support young people, either individually or in groups, by developing and facilitating programmes that address social, behavioural, welfare, developmental and protection needs.

Youth workers:

- interview young people to identify problems and act as advocates (representatives) for them, raising these issues with relevant government authorities
- advocate for young people who have a grievance with government departments or other organisations
- assist with developing policies relating to young people
- provide support and advice to young people experiencing difficulties, such as family problems, unemployment, illness, drug abuse and homelessness
- arrange and provide counselling, food, shelter or clothing
- assess risks and provide intensive short-term crisis counselling for victims of domestic violence or child abuse
- arrange for the referral of clients to appropriate specialists or community agencies
- provide information about community services and resources available for young people
- plan, conduct and evaluate programs for young people in areas such as employment and training, education, self-development, accommodation, welfare and counselling
- plan and organise activities such as sports, handicrafts, dancing, drama, hiking, bushwalking and holiday camps
- establish and supervise youth clubs and small neighbourhood support groups in the local community
- write reports and submissions requesting funding for continuing programs and new projects
- evaluate data relating to the effectiveness of community support services
- work closely with teachers, social and welfare workers, local authorities, health professionals, refuge workers, parents and, in some instances, the police.

Youth workers work in a variety of settings, including schools, hospitals, corrective institutions, youth refuges, community centres and organisations such as Scouts, Guides, YWCA and YMCA. They also work in places where young people congregate, including shopping centres, parks and reserves. Youth workers often work unsupervised and much of their work takes place outside normal hours.

Personal Requirements

- Able to take initiative
- Leadership qualities
- Good interpersonal and communication skills
- Able to work independently
- A non-judgmental attitude
- Able to plan and organise

Education and Training

To become a youth worker you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a youth worker through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Alternatively, you can become a youth worker by completing a degree in social science, social work, social welfare, counselling,

human services, youth work or a related field. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

You will need to undergo a Working with Children Check and be prepared to deal with vulnerable people.

Employment Opportunities

Youth workers are mainly employed in social welfare organisations and government departments that provide community services. There is considerable demand for this occupation, although employment opportunities and job security are often dependent on government funding.

Related Jobs

Aboriginal/Torres Strait Islander Health Worker (p 167); Art Therapist (p 94); Early Childhood Educator (p 122); Nanny (p 309); Social Worker (p 250); Teacher - Secondary (p 129).

Tourism, hospitality, sport & leisure

Australia's stunning and diverse natural scenery and bustling capital cities make it a top tourist destination. The increasing profile of niche trading sectors such as ecotourism, cultural tourism, wine tourism and sport tourism — as well as the boom in domestic travel — has created growth in the industry.

Courses and specialisations

Tourism and hospitality

Some of the majors available include: culinary management; event management; food studies; hospitality management; international tourism; resort and hotel management; restaurant management; and tourism management.

Courses in this field are largely vocationally oriented, so students are often required to work in on-campus training facilities with periods of industry placement.

Sport and leisure

This field is growing rapidly, with course choices allowing students to study the science, practical and business sides of the industry.

The following are just some of the sport and leisure majors you can study: biomechanics; exercise rehabilitation; fitness; human movement; outdoor recreation; sports coaching; sports management; sports medicine; sports science; and therapeutic recreation.

Where to study

The facilities that each institution offers may be an important factor in your decision-making process.

Both vocational and higher education qualifications at various levels are offered by a range of institutions. Getting into degree courses is not too difficult, although cut-offs for courses with a health or science side to them (such as biomechanics, exercise science or sports medicine) are high.

Five-star universities

Educational experience

GRIFFITH	90.6%
SOUTHERN CROSS	86.8%

National average
78.8%

Graduate employment

WESTERN SYDNEY	59.5%

National average
58.1%

Learner engagement

NOTRE DAME	81.5%
FLINDERS	72.7%
VU	72.5%

National average
58.2%

Learning resources

GRIFFITH	92.6%
FLINDERS	91.7%

National average
83.8%

What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

12,566
Undergraduate

3,660
Postgraduate

5,784
International undergraduate

What can I do?

Customer service
Hospitality
Tourism
Hotel management
Travel agency
Events

Graduate starting salary

$39,800
Undergraduate

$46,900
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

58.1%
Undergraduate

73.3%
Postgraduate

Five-star universities

Median starting salary

CSU	$51,500
SOUTHERN CROSS	$48,800

National average
$39,800

Skills development

GRIFFITH	87.5%
ACU	86.6%
SOUTHERN CROSS	86.5%

National average
81.2%

Student support

SOUTHERN CROSS	91.7%
TORRENS	90.5%

National average
79.4%

Teaching quality

GRIFFITH	93.8%
ACU	90.7%

National average
83.3%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Air Traffic Controller

Also known as Aeronautical Telecommunications Officer and Flight Data Officer

Air traffic controllers manage the safe and orderly flow of aircraft into, out of and between airports in Australia. They also work with overseas regions adjoining Australian airspace.

Air traffic controllers:

- maintain radio contact with pilots to keep aircraft separated in 'corridors' of controlled airspace, on air routes and near major airports
- use radar to monitor and control aircraft movements
- ensure aircraft operate only on pre-arranged routes and at approved altitudes
- provide information and assistance to pilots and emergency services during in-flight emergencies.

Air traffic controllers operate in shifts, often out of normal office hours, and are required to work on any day of the year.

Specialisations

- Enroute Controller
- Terminal Area Controller
- Tower Controller

Personal Requirements

- Able to make quick and accurate decisions
- Aptitude for working with computers
- Confident, highly responsible, self-motivated and independent, but able to work in a team
- Good understanding and clear practical application of the English language
- Australian or New Zealand citizenship, or Australian permanent residency
- At least 18 years of age
- Able to satisfy aviation medical requirements

Education and Training

To become an air traffic controller you usually have to gain your Senior Secondary Certificate of Education with passes in English, mathematics and a science subject (preferably physics).

Airservices Australia and the Royal Australian Air Force (RAAF) are the only trainers and employers of air traffic controllers in Australia.

Applicants for Airservices Australia must undergo a comprehensive selection process, including an online cognitive ability test, a computer-based aptitude test, an assessment day involving a competency-based interview, police checks, medical examinations and a drug test. Once selected, trainees undertake extensive training, covering theoretical and practical subjects as well as on-the-job instruction at the Learning Academy in Melbourne to complete the requirements for their Air Traffic Control Licence. Trainees are employed on a probationary basis while undergoing training, gaining a permanent position on successful completion of the course.

To become an air traffic controller with the RAAF you must first enter the Air Force as an officer and complete Air Force training courses in air traffic control.

Employment Opportunities

Airservices Australia runs courses for air traffic control trainees in its Learning Academy throughout the year. The dates for these are advertised on the Airservices Australia website. Final selection for training is very competitive in both Airservices Australia and the RAAF.

Job opportunities depend on growth in air traffic and the introduction of new technologies.

Related Jobs

Air Force Officer (p 150); Pilot (p 148); Train and Network Controller (p 327).

Airline Passenger Officer

Also known as Airline Customer Service Agent and Airline Customer Service Officer

Airline passenger officers work at the airport providing customer-related services such as check-in and boarding procedures, providing information and directions, locating lost luggage and assisting passengers who require special attention.

Airline passenger officers:

- issue and check tickets and travel documents, check in passengers for their flight and allocate seats on the aircraft
- check baggage size and weight
- direct passengers to immigration and/or departure gates, and provide information about customs and immigration procedures
- assist with passenger enquiries and complaints
- attend to travelling airline staff and crew
- provide information about flight arrival and departure times and use the public address (PA) system to make announcements to arriving and departing passengers
- direct passengers to luggage areas and assist passengers with lost luggage
- help passengers requiring special assistance, such as VIPs, disabled and elderly passengers, parents with infants and unaccompanied minors
- ensure security measures are adhered to at all times.

Airline passenger officers are required to work shifts, which may include weekends, public holidays and nights.

Personal Requirements

- Excellent communication and interpersonal skills
- Alertness and common sense
- Enjoy working with people
- Neat personal appearance
- Pleasant personality
- Comfortable using computers
- Able to deal with difficult situations
- Able to work under pressure in peak periods

Education and Training

You can work as an airline passenger officer without formal qualifications. Employers generally require you to gain your Senior Secondary Certificate of Education with good results in English and mathematics, and/or have relevant clerical and customer service experience.

The selection process involves aptitude testing and an assessment of educational qualifications and previous workplace experience. Following selection and appointment, airline passenger officers undergo initial in-house training, which covers service standards and protocols, computer reservations, check-in systems and security training.

You can also become an airline passenger officer through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Experience in a service industry, such as hospitality or retail, may be highly regarded. All persons working in the airline industry must satisfy security clearance requirements.

Employment Opportunities

Most airline passenger officers are employed by the major airlines operating in Australia such as Qantas, Jetstar and Virgin Australia. Many are employed on a permanent part-time basis. Competition for positions is strong. With experience, and sometimes further training, airline passenger officers may progress to supervisory or managerial positions.

Related Jobs

Airline Baggage and Freight Handler (p undefined).

Baker

Bakers make bread, cakes and pastries using flour and other ingredients.

Bakers:

- check that equipment meets health and safety regulations
- check the quality of raw materials and weigh ingredients
- mix dough and batters by hand or machine, then place in tins or trays
- load tins or trays into ovens, keeping an eye on the oven temperatures and the appearance of the bread, cake or pastry
- unload ovens when the bread and other products are baked, take products out of trays and put aside to cool
- glaze or decorate cakes and pastries with icing or cream
- order baking supplies from wholesalers
- operate slicing and wrapping machines
- serve customers.

The increased use of machinery has reduced heavy work for bakers. However, they still have to stand a lot of the time. Most bakers work full time, and they often work late at night or early in the morning. They may also work on weekends and public holidays. Conditions in the bakery are usually hot and humid.

Personal Requirements

- Enjoy practical work
- Good hand-eye coordination
- Good health, with no skin allergies or chest complaints
- Able to cope with the physical demands of the job
- Neat and clean
- Good literacy and numeracy skills
- Good organisational skills

Education and Training

To become a baker you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Bakers are employed in factories producing baked products, specialty cake stores, 'in-house' bakeries in supermarkets and independent or franchise bakeries.

Bakers with sufficient start-up money may set up their own businesses.

Related Jobs

Barista (p 257); Chef (p 259); Cook (p 260).

Bar Attendant

Also known as Beverage Attendant

Bar attendants prepare and mix drinks, serving customers in hotels, bars, cafes, restaurants, clubs and other licensed entertainment venues.

Bar attendants:

- serve alcoholic and non-alcoholic drinks
- draw beer from the tap or pour from bottles
- mix ingredients to make cocktails and slice fruit to garnish drinks
- prepare and serve a variety of coffees
- collect payment, operate cash registers and give change
- refill drink and cigarette dispensers
- collect glasses from tables and place them in glass-washing machines
- wipe down tables and empty ashtrays
- clean bar service area and polish glasses
- arrange bottles and glasses on shelves
- assist in the cellar
- assist in stock control
- maintain workplace hygiene, occupational health and safety, and security procedures.

Bar attendants work in venues that are often busy and noisy. They may have to deal with difficult customers who may be under the influence of alcohol. They usually work shifts, including weekends, evenings and public holidays. Uniforms may be supplied by employers. Bar attendants must be at least 18 years of age, although some training providers give exemptions for the purpose of training.

Specialisations

- Bar Manager

Personal Requirements

- Good interpersonal skills
- Good memory
- Able to work quickly and efficiently
- Enjoy working with people
- Good personal presentation
- Good cash-handling skills
- Able to stand for long periods

Education and Training

You can work as a bar attendant without formal qualifications. You will probably get some informal training on the job.

You can also become a bar attendant through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

To serve, sell or offer liquor, you must obtain a Responsible Service of Alcohol (RSA) certificate. RSA courses are widely offered by TAFE institutes and Registered Training Organisations.

Employment Opportunities

Bar attendants work in hotels, bars, restaurants, cafés, clubs, recreation and convention centres and other licensed entertainment venues. As turnover is relatively high, there is generally a constant demand to replace those leaving the job.

Bar attendants who have undertaken training or are experienced are highly regarded by employers. In larger establishments, bar attendants with experience and qualifications may progress to supervisory or management positions.

Related Jobs

Barista (p 257); Kitchen Hand (p 266); Winery Worker (p 274).

Barista

$1,154 | Lower skill | Strong

Baristas prepare and serve espresso coffee and other hot beverages to patrons in restaurants, cafes, coffee shops and dining establishments.

Baristas:

- prepare and serve a variety of coffees such as lattes, cappuccinos and other espresso-based beverages
- clean and maintain coffee-making areas and espresso machines
- select and grind coffee beans
- collect payment, operate cash registers and give change
- assist in stock control
- maintain workplace hygiene, and follow occupational health and safety procedures.

Baristas work in venues that are often busy and noisy. They usually work shifts, including early mornings, weekends, evenings and public holidays. Uniforms may be supplied by employers. To serve alcohol you must be at least 18 years of age.

Personal Requirements

- Good interpersonal and communication skills
- Good memory
- Able to work quickly and efficiently
- Enjoy working with people
- Good personal presentation
- Confidence in handling money
- Able to stand for long periods

Education and Training

You can work as a barista without formal qualifications. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications. You can become a barista through a VET qualification in hospitality. Many training providers also offer short courses in coffee making. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a barista through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Baristas work in hotels, bars, restaurants, cafés, coffee shops and recreation and convention centres. As turnover is relatively high, there is generally a constant demand to replace those leaving the job.

Baristas working in licensed venues may be required to obtain a Responsible Service of Alcohol (RSA) certificate. see the separate entry for Bar Attendant for further information.

Baristas who have undertaken training or are experienced are highly regarded by employers. In larger establishments, baristas with experience and qualifications may progress to supervisory or management positions.

Related Jobs

Baker (p 256); Chef (p 259); Kitchen Hand (p 266).

Butcher

$1,056 | Medium skill | Moderate

Butchers select, cut, trim and prepare meat for sale or supply.

Butchers:

- cut, trim and shape standard cuts of meat to size
- process carcasses into primary and secondary cuts
- pack and store products for display and sale
- order supplies from wholesalers using AUS-MEAT Language, and weigh and check stock on receipt
- assemble and operate mincers, grinders, mixers, patty-forming or sausage-forming machines, and bandsaws
- use correct detergents and sanitisers to prevent food poisoning and contamination of premises and equipment
- assist clients (including hotels and restaurants) with menu planning, estimating food portions and production costs
- collect payment for sales
- prepare marinated meats and ready-to-cook dishes
- advise customers about alternative cuts, cooking methods, storage requirements and nutritional aspects of meat.

Butchers work with a variety of knives, hand tools, power equipment (including mincers, mixers and bandsaws) and computer-operated machinery.

They work in shops and boning/slicing rooms. They usually have early morning starts and their work involves a lot of contact with people, such as customers and workmates. Butchers are exposed to animal blood.

Personal Requirements

- Enjoy practical and manual activities
- In good health
- Able to cope with the physical demands of the job
- Good hand-eye coordination
- Good interpersonal skills

Education and Training

To become a butcher you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Most butchers are employed in retail businesses or supermarkets. Some are self-employed. Butchers also work in wholesale and export businesses where they prepare meat for local consumption or export. Qualified butchers may have the opportunity to become involved in other areas of the hospitality and food industries, such as meat and meat products inspection, export and associated services.

Related Jobs

Chef (p 259); Cook (p 260); Primary Products Inspector (p 312).

Caterer

Also known as Restaurant Manager

Caterers organise and control the operations of establishments involved in catering and dining, such as restaurants, cafes, cafeterias and canteens.

Caterers:

- discuss catering arrangements with clients
- talk with the chef to plan the menu
- supervise the purchase and storage of food
- supervise provision of all crockery, cutlery, detergents and kitchenware
- ensure there is adequate security for food and equipment
- keep records of payments and expenses
- plan, coordinate and supervise the activities of workers in dining rooms, kitchens, bars and other areas
- manage staff hiring, training and rostering
- ensure the dining rooms, kitchen, storage facilities and other work areas are kept clean and conform to health regulations
- attend to complaints concerning food and service.

Personal Requirements

- Good communication and organisational skills
- Able to remain calm in difficult situations
- Able to work as part of a team

Education and Training

You can work as a caterer without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have qualifications and you may like to consider a VET course. You may need to be 18 years or older to undertake some units. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information. You can also become a caterer through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

To serve alcohol, caterers must be at least 18 years old and hold a Responsible Service of Alcohol (RSA) certificate. RSA short courses are widely offered by TAFE institutes and Registered Training Organisations.

Employment Opportunities

Caterers work in large hotels, hospitals, schools, catering firms, department stores and other retail outlets. They also work in industrial and defence centre canteens, restaurants, licensed clubs and casinos. Self-employment is possible. Positions tend to be filled by promoting an experienced person from within the organisation. People who intend to run their own business are advised to gain experience, both on the job and by studying an appropriate course.

Related Jobs

Chef (p 259); Cook (p 260); Events Coordinator (p 263).

Cheesemaker

Cheesemakers make and supervise the making of cheese.

Cheesemakers:

- operate a wide range of mechanical equipment, often from a sophisticated control room
- monitor the production of cheese using process control and recording systems
- supervise and carry out the cleaning, sanitation and preparation of equipment.

In small factories that use traditional methods there is a lot of skilled manual work. Cheesemakers are often required to work shifts.

Personal Requirements

- Good communication skills
- Enjoy practical and manual activities
- High standard of personal hygiene
- Able to supervise other workers.

Education and Training

To become a cheesemaker, you usually have to complete a traineeship. Entry requirements may vary, but employers generally require Year 10 and some prefer Year 12.

Employment Opportunities

Cheesemakers work in cheesemaking factories, which are usually located in regional dairy areas. Some small factories are located in outer-metropolitan suburbs. Opportunities may exist for self-employment usually in small, boutique cheesemaking establishments.

Chef

$1,250 | High skill | Very strong

Chefs plan and organise the preparation and cooking of food in a number of settings.

Chefs:

- plan menus and determine food and labour costs
- recruit and train staff
- plan staff rosters and supervise the activities of cooks and assistants
- discuss food preparation issues with managers, dietitians and other staff members
- order food, kitchen supplies and equipment
- demonstrate techniques to cooks and advise on cooking procedures
- prepare and cook food
- explain and enforce hygiene regulations
- freeze and preserve foods.

Chefs may be required to work shifts, including weekends and public holidays, sometimes on a 24-hour rotating roster. The work may be stressful, especially at peak hours of the day. The range of duties carried out by chefs will vary depending on where they work. In larger establishments, the chef de cuisine or head chef generally does more supervising than cooking. Senior chefs have to attend staff meetings, where they discuss problems related to their areas, and receive or issue instructions to other managerial staff. In small restaurants, the head chef may prepare food, assisted by other cooks or apprentices. As well as expert cooking knowledge, chefs involved in supervision need a general knowledge of the skills and activities of all their workers. Chefs who have management responsibilities may also perform duties such as complaints resolution and maintenance of financial records.

Specialisations

- Chef de Cuisine
- Chef de Partie
- Commis Chef
- Demi Chef de Partie
- Sous Chef/Second Chef

Personal Requirements

- High level of personal cleanliness
- Enjoy cooking
- Able to organise efficient work schedules
- Good interpersonal, communication and customer service skills
- Able to work as a leader and as part of a team
- Punctuality
- Able to work under pressure and stay calm in difficult situations

Education and Training

To become a chef you usually have to complete an apprenticeship. Entry requirements may vary, but employers usually require Year 10.

Additional Information

Although both chefs and cooks complete an apprenticeship at certificate III level initially, chefs are generally required to gain further skills at certificate IV level and above.

Employment Opportunities

Chefs are employed in hotels, motels, restaurants, clubs, cafés, cafeterias, hospitals, flight catering centres, seagoing vessels and food processing factories. Chefs with sufficient start-up money may become restaurant owners. The majority of chefs work in capital cities and in large country centres, particularly in areas where there are tourist resorts. Expanded tourism has increased demand for highly skilled chefs, particularly in establishments of international standard. In large kitchens, chefs usually progress from commis chef to chef de partie, to sous chef, to chef de cuisine, to executive chef or food manager. Movement between employers within the industry may be required in order to gain experience and promotion.

Related Jobs

Baker (p 256); Barista (p 257); Butcher (p 257); Confectioner (p 260); Cook (p 260).

Cleaner

$904 | Entry level | Moderate

Cleaners clean schools, construction sites, commercial, industrial and domestic premises, industrial machinery and vehicles using portable cleaning equipment.

Cleaners:

- operate vacuum cleaners to clean floors, work areas and machinery
- clean, dust and polish furniture and fittings
- sweep, mop, scrub and polish floors; shampoo carpets and rugs; and strip wax and polish from floors
- clean walls and windows
- clean and disinfect laundry, kitchen, toilet and bathroom fixtures and floors
- empty and clean ashtrays and waste containers
- clean areas surrounding buildings, such as paths and entrances.

Cleaners are often responsible for the security of the building in which they work. This responsibility includes ensuring that lights and electrical appliances are turned off, that the building is locked and secure and that any security breaches are reported to building owners or managers. Cleaners often work irregular hours in shifts and may be employed as full-time, part-time or casual staff.

Specialisations

- Housekeeper
- Window Cleaner

Personal Requirements

- Enjoy practical work
- Methodical
- Honest and reliable
- Able to bend, stand and lift

Education and Training

You can work as a cleaner without formal qualifications. You will probably get some informal training on the job. You can also become a cleaner through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Depending on your work setting some employers may require you to undergo a National Police Check.

Employment Opportunities

Most cleaners work for contract cleaning companies or large factories, businesses or firms. A high proportion of cleaners are employed on a permanent part-time or casual basis, and many have to work very early in the morning or at night. Opportunities exist for experienced cleaners to become supervisors and managers in some of the larger contract cleaning firms. Self-employment is also possible.

Related Jobs

Dry Cleaner (p 290); Facilities Officer (p 294); Garbage Collector (p 298); Kitchen Hand (p 266); Ward Assistant (p 181).

Confectioner

$1,208 | Entry level | Strong

Also known as Chocolatier

Confectioners mix, shape and cook sweeteners and other ingredients to produce confectionery, including chocolate, toffee and other lollies.

Confectioners:

- examine production schedules to determine confectionery types and quantities to be made
- check the cleanliness and operation of equipment before beginning production
- weigh, measure, mix, dissolve and boil ingredients in pans
- operate equipment that refines and tempers chocolate
- assist with coating chocolate bars and preparing chocolate products
- control temperature and pressure in cookers used to make boiled sweets, starch-moulded products, caramels, toffees, nougat and chocolate centres
- operate equipment to compress sugar mixes into sweets
- check batch consistency using a stainless steel spatula or measuring equipment such as a refractometer
- sort and inspect finished or partly finished products.

Most confectioners work full time. Senior confectioners provide on-the-job training to junior employees and coordinate work in a team environment.

Personal Requirements

- Enjoy practical and manual activities
- Able to cope with the physical demands of the job
- Neat and clean
- Enjoy working in a team

Education and Training

To become a confectioner you usually have to complete a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Most confectioners are employed by confectionery manufacturers and work in factories. With more experience, confectioners can be involved in developing confectionery items with new textures, colours and flavours. With experience, and sometimes further training, it is possible to progress to leading hand, supervisory or management positions.

Related Jobs

Baker (p 256); Chef (p 259); Cook (p 260); Food Process Worker (p 295).

Cook

$1,068 | Medium skill | Strong

The range of duties carried out by cooks varies depending on where they work. In hotels, clubs, restaurants and takeaway food outlets, cooks often specialise in preparing and cooking a particular type of food (fried chicken, pizza or barbecued meat, for example). They may also specialise in national cuisine (such as Thai, Vietnamese, French or Italian). Other specialisations include entrees, desserts, international and bakery cooking.

Cooks:

- check food to ensure its quality
- regulate temperatures of ovens, grills and other cooking equipment
- prepare food for cooking
- cook food using a range of methods (baking, braising, frying, roasting or steaming, for example)
- divide food into portions and ensure it is well presented
- clean food preparation areas and equipment
- store food in temperature-controlled facilities
- receive and store supplies
- ensure the kitchen is hygienic and functional
- plan menus and estimate food requirements
- prepare food to meet special dietary requirements
- train and supervise other staff.

Cooks may be required to work shifts, including weekends and public holidays, sometimes on a 24-hour rotating roster. The work may be stressful, especially at peak hours of the day.

Personal Requirements

- Enjoy cooking
- A high level of personal hygiene
- Able to manage time and work under pressure
- Good communication skills
- Punctuality

- Able to stay calm in difficult situations
- Able to work well in a team

Education and Training

You can work as a cook without formal qualifications. You will probably get some informal training on the job. You can also become a cook through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Cooks are employed by hotels, motels, restaurants, function centres, catering companies, clubs, cafés, cafeterias, hospitals, flight catering centres, seagoing vessels, food processing factories and large boarding schools. Movement between employers may be required in order to gain experience and promotion.With experience and further training, qualified cooks may be promoted to supervisory positions.

Related Jobs

Butcher (p 257); Confectioner (p 260); Kitchen Hand (p 266).

Coxswain

Coxswains manage the operation of small commercial marine vessels, such as fishing boats, ferries, water taxis, jet boats, yachts, catamarans and tourist craft.

Coxswains:

- manoeuvre and navigate small vessels
- consult weather authorities before planning a voyage
- give instructions to the crew
- communicate with passengers
- update vessel logbooks
- assist with mooring and unmooring vessels
- monitor condition and seaworthiness of vessels
- transmit and receive information by marine radio or telephone
- respond to emergency situations
- use navigational information and techniques to conduct a safe passage
- service propulsion systems, low-voltage electrical systems and auxiliary systems
- operate pumping systems, and outboard and inboard diesel engines.

Coxswains may operate vessels up to 12 metres in length in sheltered waters. Those who wish to operate larger vessels further from the coast will need to gain additional qualifications.

Personal Requirements

- Willing to spend time at sea
- Able to lead and manage a crew
- Commitment to safety
- Pass an eye test and have normal colour vision
- Good health and able to pass a medical examination.

Education and Training

To become a coxswain, you usually have to complete a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

To work as a coxswain you will need to obtain a Certificate of Competency from the Australian Maritime Safety Authority (AMSA). To be eligible, you must be at least 16 years of age, complete minimum sea service requirements, hold a current Provide First Aid Certificate and meet specific medical and eyesight standards. You must also hold a Marine Radio Operator's VHF Certificate of Proficiency. Visit the AMSA website for more information. Once you are employed, you may be able to develop, and have recognised, additional skills under the Maritime Training Package that will expand your career opportunities within this industry.

Employment Opportunities

Coxswains usually start their careers in the maritime industry as deckhands before gaining enough experience to sit the Coxswain Certificate of Competency test. Possible employers include fishing charters, tourism operators, government organisations and offshore mining companies. With further training and experience, coxswains may work in the deck or engineering department of near coastal or blue water vessels.

Deckhand

Deckhands undertake a wide range of fishery and maritime work on land and at sea, including communications, supply, seamanship, hospitality and stores. They may also use equipment such as nets, lines and traps to catch fish, crustaceans and molluscs.

Deckhands:

- relay information to crew, other ships and harbour authorities using radio and satellite equipment
- provide hospitality services such as table preparation, bar service and cabin care for patrons
- attach runners, weights, buoys, anchors, poles, stakes, wood or metal beams to nets, traps or pots
- sort, clean, process, preserve and package catches
- load, unload and stow supplies and equipment
- operate dinghies and dories
- operate winches and other deck equipment.

A deckhand's duties may vary depending on the function of the vessel. A fishing vessel may require the use of pots, lines and scuba equipment, whereas a recreational or transportation vessel may require hospitality services such as table preparation, bar service and cabin care for patrons. Deckhands work in all types of weather conditions and spend long hours at sea. Conditions can be cramped and deckhands may be required to work odd hours. Shifts may include four hours of work followed by four hours of sleep.

Personal Requirements

- Physically fit (a medical examination may be required)
- Normal colour vision (to become a skipper, although restricted licences may be available)
- An awareness of maritime safety issues
- Good hand-eye coordination
- A good sense of balance
- Able to cope with the physical demands of the job
- Able to work as part of a team

Education and Training

You can work as a deckhand without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a deckhand through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Employment may be available in fisheries cooperatives; state, territory or federal fisheries agencies; fishing gear manufacturers; research vessels; equipment suppliers; and fish processing firms. Many smaller fishing vessels are family owned and operated, and recruitment on such vessels is often from within the family. Demand for people to work on fishing vessels is seasonal. While the fishing sector provides the most job opportunities for deckhands, employment is also available on recreational, transport and other commercial vessels.

Related Jobs

Aquaculture Technician (p 29); Navy Sailor (p 158).

Diver

Divers carry out a range of duties underwater using self-contained underwater breathing apparatus (SCUBA), surface breathing apparatus or underwater work chambers. With experience, and sometimes further training, divers may become a ship's diver or dive supervisor.

Divers:

- inspect diving equipment before diving
- build, check and repair underwater constructions such as harbour wall foundations, ship hulls, jetties, piers and pipelines, sometimes using cutting or welding equipment
- use cables, floatation gear or ropes to bring underwater objects to the surface
- carry out underwater exploration
- carry out underwater search and rescue operations to recover bodies, stolen goods and other property (police divers)
- build and look after fish farms
- supervise and teach others to dive
- operate cameras for underwater filming (such as for nature documentaries)
- place recording instruments underwater
- operate decompression and recompression chambers.

Professional diving is both physically and mentally demanding, with a lot of time spent working underwater. It is a potentially hazardous occupation, so divers must work under strict safety standards.

With experience, and sometimes further training, divers may become a ship's diver or dive supervisor.

Personal Requirements

- Able to cope with the physical demands of the job
- Able to pass a strict medical examination
- Responsible and safety-conscious
- Able to work as part of a team
- Able to solve mathematical problems

Education and Training

There is little prospect of an untrained person finding employment as a trainee commercial diver. Companies expect potential employees to have some diving experience and a relevant qualification.

To work as a diver you need to attain certification as a commercial diver, although in some areas (such as abalone diving and reef fish collecting), a recreational scuba qualification such as those issued by the Professional Association of Diving Instructors (PADI) may be sufficient. The required qualifications vary depending on the specialist area you wish to enter. Commercial diving qualifications are available through short courses, which are provided by training establishments accredited by the Australian Diver Accreditation Scheme (ADAS). These courses can provide the foundation for progressing to higher academic courses within Australia. Costs, duration and entry requirements vary. Contact ADAS for more information.

ADAS recognises four levels depending on the amount of experience and courses completed:

• Level 1 - Occupational SCUBA (onshore to 30m)

• Level 2 - Surface Supply Breathing Apparatus (onshore to 30m)

• Level 3 - Surface Supply Breathing Apparatus (offshore to 50m)

• Level 4 - Saturation/Closed Bell (offshore to open limit).

To apply for a commercial diving licence, you must be at least 18 years of age, hold a certificate of recreational diving competence and be able to swim competently. You must also hold a Provide First Aid certificate and be highly skilled in cardiopulmonary resuscitation (CPR) or oxygen administration. Applicants must also have a certificate of medical fitness, issued by a doctor trained and experienced in underwater medicine.

Employment Opportunities

Commercial divers are employed on contracts and work both interstate and overseas. Most find work as onshore construction divers or with the offshore oil and gas industry, state or territory fisheries departments, water authorities, fish farms or civil engineering firms. Employers of construction divers prefer applicants with a metals and engineering trade background (such as fitting, plumbing, welding, rigging, fitting explosives, electronics and motor mechanics). Although a trade is not essential, divers are expected to be proficient both manually and with tools.

In the recreational diving field, opportunities are limited to people holding an instructor or divemaster qualification. Recreational diving instructors in metropolitan centres are busy during summer and may work interstate or overseas during other seasons. Most work outside of the busiest times is on a part-time or casual basis. Seafood-related work is also often seasonal. Demand for recreational divers in Australia is largely affected by tourism activity, particularly the number of people seeking diving instruction. Demand for offshore construction divers is strongly linked to the level of offshore oil and gas exploration.

After retiring from active diving, divers often move to other positions in the industry, such as supervising, dive shop work or operating decompression and recompression chambers.

Related Jobs

Deckhand (p 261).

Events Coordinator

Also known as Conference Coordinator , Functions Coordinator , Meetings and Events Manager and Convention Coordinator

Events coordinators plan and organise special events, including parties, wedding receptions, product launches, banquets, meetings, conferences and conventions.

Events coordinators:

- talk with clients about events and offer suggestions to ensure their requests can be met
- negotiate the type and costs of services to be provided, in line with a budget
- organise the venue and ensure that it is appropriately set up, with regard to seating and decor
- consult with management to ensure adequate staff members are rostered for duty, and with catering staff to plan the menu
- consult with service providers such as entertainers and transport companies
- coordinate staff to ensure the program of events occurs on time (for example, speeches and the serving of food and refreshments)
- oversee work by contractors and report on variations to work orders
- find solutions to any problems that arise concerning services or programs provided
- advise senior management on matters requiring their attention and implement their decisions
- follow up with clients to arrange payment and, after the event, to evaluate the service provided
- collect and analyse data on projects undertaken, and report on project outcomes.

Depending on the size of the establishment, events coordinators may work independently or as part of a team. They often work irregular hours, and on weekends and public holidays.

Personal Requirements

- Enjoy working with people
- Good organisational and time management skills
- Attention to detail
- Good interpersonal and supervisory skills
- Good communication skills
- Neat personal appearance
- Able to negotiate, delegate and work under pressure

Education and Training

You can work as an events coordinator without formal qualifications, but employers usually require Year 10. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications and/or experience in the tourism and hospitality industry. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become an events coordinator through a traineeship in Events. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Events coordinators work in large hotels, function and conference centres, community centres and tourist resorts. There are also opportunities for self-employment. Events coordinators may specialise in particular kinds of events such as weddings.

Employment prospects depend on the number, size and frequency of special events.

Related Jobs

Caterer (p 258); Civil Celebrant (p 284); Funeral Attendant (p 297).

Fitness Instructor

Also known as Gym Instructor

Fitness instructors are involved in the assessment, teaching, training and supervision of a variety of people in health and fitness clubs, gymnasiums, sports centres and community recreation organisations. Fitness instructors may specialise in fields such as aerobics, aqua-fitness, personal training, exercise for specific groups (such as older people), resistance training and swimming.

Fitness instructors:

- assess the needs and capabilities of individuals through weighing, measuring and conducting fitness tests to check blood pressure, heart rate and lung capacity
- provide training and assistance to individuals and groups by preparing a routine of exercises to music
- provide advice to individuals on the correct method of exercising with weightlifting equipment, exercise bikes, treadmills and other training and exercise machines
- devise personal exercise programs for individuals according to age and level of fitness
- provide instruction in a variety of fitness activities
- provide general non-medical nutrition advice
- assist with the cleaning and general maintenance of the centre and ensure equipment is maintained and correctly set up.

Fitness instructors may be employed on a casual basis and work at a number of different locations, including fitness centres, clinical settings, private practice and in the workplace. Shiftwork is often involved, including early mornings and late nights.

Specialisations

- Personal Trainer

Personal Requirements

- Good level of physical fitness
- Enthusiastic, outgoing personality
- Background in fitness activities may be an advantage
- Good communication skills

Education and Training

To become a fitness instructor you usually have to complete a VET qualification in fitness. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a fitness instructor through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Registration by Fitness Australia or Physical Activity Australia is generally accepted as the minimum requirement to work as an instructor in the health and fitness industry. Registration requires a current Provide First Aid Certificate and a Cardiopulmonary Resuscitation (CPR) Certificate.

The registration category depends on your qualification and level of experience. Those who have obtained a Certificate III in Fitness can register as an Exercise Instructor and are eligible to register as a Gym Instructor, Children's Instructor, Older Adults Instructor, Aqua Instructor or Yoga Teacher. Those who have obtained a Certificate IV in Fitness can register as an Exercise Trainer and are eligible to become a Personal Trainer, Children's Trainer, Older Adults Trainer or Aqua Trainer. Those who have obtained a diploma can register as a Specialised Trainer.

Fitness Australia and Physical Activity Australia are responsible for all aspects of assessing and registering fitness instructors in Australia. Registration is valid nationwide.

Employment Opportunities

Fitness instructors can expect to find employment instructing individuals or groups in traditional settings, such as fitness centres or studios. Roles introduced more recently include assessment, consulting, health promotion and management roles in settings such as community, sport, workplace, clinical, outdoor and mobile services.

A high proportion of fitness instructors are employed on a part-time or casual basis, although an increasing number of full-time positions are becoming available within the industry.

Related Jobs

Recreation Officer (p 124); Sports Coach (p 270); Teacher - Physical Education (p 127).

Flight Attendant

Also known as Cabin Crew

Flight attendants provide onboard service to aircraft passengers and ensure the observance of airline safety procedures.

Flight attendants:

- conduct pre-flight cabin checks
- check boarding passes and direct passengers to seats
- advise passengers of safety regulations
- distribute reading material and serve meals and drinks
- provide first aid treatment and assist sick passengers
- anticipate and provide for the comfort of passengers needing special attention, including unaccompanied children, parents with infants, people with disability, the elderly and non-English speaking passengers
- take action in the event of decompression, turbulence, mechanical malfunction or unlawful acts by passengers
- prepare for emergency landings and the evacuation of passengers.

Flight attendants work in shifts that involve irregular hours, working weekends and public holidays, and spending time away from home. They work long hours in a pressurised cabin and must adjust to varying climatic conditions and different time zones.

Specialisations

- Cabin Supervisor

Personal Requirements

- Friendly personality with excellent interpersonal and communication skills
- Able to work as part of a team
- Neat personal appearance at all times
- Able to work under pressure and within tight time frames
- Able to adapt easily to an irregular lifestyle
- Able to cope with the physical demands of the job
- Able to satisfy height requirements (for some airlines)
- Able to swim approximately 20 to 50 metres unaided (for some airlines)
- At least 18 years of age

Education and Training

You can work as a flight attendant without formal qualifications. Entry requirements may vary, but the major airlines generally require you to gain your Senior Secondary Certificate of Education with good results in English and mathematics, combined with the successful undertaking of written and practical examinations, as well as behavioural assessments.

Entry to this occupation may be improved if you have qualifications and/or relevant experience in the hospitality or customer service industry.

You can also become a flight attendant through a traineeship. Entry requirements may vary, but employers generally require Year 10.

On appointment, flight attendants undertake initial in-house training, prior to commencing flight duties.

Additional Information

The major airlines prefer candidates who speak a second language or can demonstrate an awareness of and respect for other cultures.

Applicants are required to have a Provide First Aid Certificate, a Responsible Service of Alcohol certificate and a valid passport, all with a minimum of 12 months' validity. All persons working in the airline industry must satisfy security clearance requirements.

Flight attendants receive regular training throughout their careers and their performance is monitored to ensure high standards.

Employment Opportunities

Competition for flight attendant positions is very strong and the supply of applicants far outweighs demand.

Flight attendants are usually based in particular Australian capital cities. Contact the airlines for full details.

With experience and further training, flight attendants may progress to the position of cabin supervisor or cabin manager.

Related Jobs

Airline Passenger Officer (p 255).

Gaming Worker

Gaming workers provide gamblers with gaming services in casinos and other gambling establishments.

Gaming workers:

- monitor cash given to cashiers and transactions of gaming tokens (called chips)
- look out for possible incidents and settle disputes arising at gaming tables
- deal games in accordance with casino rules, policies and procedures
- advise patrons about the rules and etiquette of games
- check gaming equipment and ensure it is in good condition
- report any missing or damaged equipment.

Gaming workers are required to work shifts, including nights, weekends and public holidays. They may have to stand for long periods of time. Uniforms may be provided.

Specialisations

- Croupier
- Gaming Machine Worker

Personal Requirements

- Mature and confident
- High level of integrity
- Able to make calculations quickly and accurately
- Neat personal appearance
- Good communication skills and friendly personality
- Able to work under pressure and deal with difficult customers
- Able to concentrate for long periods of time without distraction
- Good with hands
- At least 18 years of age

Education and Training

You can work as a gaming worker without formal qualifications, but employers usually require Year 10. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a gaming worker through a traineeship in Hospitality. Entry requirements may vary, but employers generally require Year 10.

Additional Information

A special licence is required in most states and territories. This includes a National Police Check, credit references and fingerprinting. You must also complete a Responsible Service of Gaming training course, which may either be incorporated into staff training or completed separately.

Employment Opportunities

Casinos run their own training courses when new croupiers are required. Trainee croupiers are instructed in gaming rules and basic chipping and shuffling skills. Competition for positions is strong.

Related Jobs

Bookmaker's Clerk (p undefined).

Hotel and Motel Front Office Attendant

Also known as Hotel Concierge

Hotel and motel front office attendants look after the needs of guests on arrival and during their stay in a hotel or motel.

Hotel and motel front office attendants:

- receive reservations for accommodation from clients, either in person, online or by telephone, fax or email
- take guests' details and allocate their rooms
- talk to transport carriers (such as airlines, bus companies and rental car agencies) to make and confirm travel arrangements for guests
- inform guests of the hotel/motel's services and facilities, policies and procedures
- provide tourist information to guests
- make reservations for sightseeing tours, restaurants, the cinema and live entertainment
- deal with enquiries and requests from guests
- take messages for guests
- finalise guests' bills and issue receipts upon payment
- arrange accommodation for guests travelling to other destinations
- perform cashier duties and exchange foreign currency
- place guests' possessions in a safe if requested
- coordinate the cleaning of guests' personal laundry, shoe shining and room service deliveries
- follow in-house procedures to help ensure the security of guests and employees
- perform general secretarial duties, such as preparing correspondence and attending to a switchboard.

In a small or medium-sized hotel, all of the above duties may be carried out by one person. However, in an international-standard hotel, several attendants may be employed. Each attendant is allocated a set of specific duties to perform (for example, one may attend to guest reception, another may be responsible for the switchboard, while another works as an information officer). Hotel and motel front office attendants usually work shifts, including evenings, weekends and public holidays.

Personal Requirements

- Enjoy working with people
- Friendly, helpful and patient
- Able to assist guests with a limited understanding of English
- Good communication and interpersonal skills
- Able to record information accurately
- Able to work as a leader and as part of a team
- Able to project a professional manner at all times
- Flexible and resourceful
- Able to stay calm in difficult situations

Education and Training

You can work as a hotel and motel front office attendant without formal qualifications. You will probably get some informal training on the job.

You can also become a hotel and motel front office attendant through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Experience in word processing and operating office machinery such as switchboards is desirable. The ability to speak a second language is an advantage if working in an international hotel.

Employment Opportunities

Hotel and motel front office attendants are employed by hotels, motels, resorts, guesthouses and hostels throughout the country. They may work in privately owned hotels or motels, or in companies that operate a chain of establishments.

Jockey

$1,548 Medium skill Very strong

Jockeys ride racehorses at race meetings, in trials and for exercise.

Jockeys:

- receive instructions from trainers and owners before races
- ride horses during exercises, race trials and races
- judge the abilities of each horse and the best tactics to use to win each race
- discuss performance of horses with trainers after races or exercise gallops
- report anything that may have affected the horse's performance in a race to stewards and other racing authorities
- answer stewards' enquiries regarding the performance of their horse
- study videotapes of races to improve their own performance and to determine the best way to ride certain horses, after discussion with the trainer
- maintain their own riding equipment, including saddles and boots.

A jockey's time is usually split between early morning trackwork and riding at race meetings. Apprentice jockeys often live at the stables and may initially be required to perform the same work as stablehands. Jockeys must pay careful attention to diet and exercise, as they have to keep their weight down.

Personal Requirements

- Enjoy working with horses
- Light build
- Athletic, with a good sense of balance
- Steady nerves
- Competitive
- Age and weight limits apply

Education and Training

To become a jockey you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

To work as a jockey, you must be licensed. This licence can be obtained from the racing authority in your state or territory. Applicants must undergo assessments, and there is a minimum age requirement in most cases.

Employment Opportunities

Apprentice jockeys work for racehorse trainers. At the completion of the contract of training, jockeys become self-employed and work with racehorse trainers and owners to obtain rides in races.

Those who find that they do not have the qualities needed to be a successful jockey may continue in the industry as stablehands, trackwork riders, farriers, float drivers and track officials. Some become licensed horse trainers.

Related Jobs

Horse Trainer (p 336); Sportsperson (p 271); Stablehand (p 38); Track Rider (p 272).

Kitchen Hand

$1,000 Entry level Strong

Also known as Dishwasher and Sandwich Hand

Kitchen hands assist cooks and chefs in preparing and storing food, washing dishes and kitchen utensils, and cleaning work areas.

Kitchen hands:

- wash and clean utensils and dishes, and make sure they are stored appropriately
- handle, sort, store and distribute food items
- wash, peel, chop, cut and cook foodstuffs, and help prepare salads and desserts
- sort and dispose of rubbish and recycling
- organise laundering of kitchen linen
- clean food preparation equipment, floors and other kitchen tools or areas.

Kitchen hands may be employed on a full-time, part-time, casual or seasonal basis and usually work in shifts. They must be prepared to work irregular hours and stand for long periods. Protective clothing such as overalls, hairnets or gloves may be provided.

Personal Requirements

- Enjoy practical work
- Good hand-eye coordination
- Able to work quickly and safely with minimal supervision
- Good personal hygiene
- Free from skin allergies to foods and detergents
- Good communication skills
- Able to work under pressure
- Able to work as part of a team

Education and Training

You can work as a kitchen hand without formal qualifications. You will probably get some informal training on the job.

You can also become a kitchen hand through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

This job provides the opportunity to learn about other kitchen work and can serve as an introduction to the catering and hospitality industries.

Employment Opportunities

Kitchen hands work in hotels, motels, restaurants, cafés, catering companies, hospitals, takeaway food bars, boarding schools, and factory or office canteens. They mostly work on a part-time or casual basis.

There is usually steady demand for experienced kitchen hands due to high staff turnover.

Related Jobs

Bar Attendant (p 256); Barista (p 257); Cleaner (p 259).

Lifeguard

Also known as Pool Attendant

Lifeguards look after the safety of people at beaches or swimming pools through accident prevention and rescue, as well as public relations and public education.

Lifeguards:

- supervise swimmers and bathers to prevent accidents and make sure they follow safety regulations
- rescue swimmers in difficulty and provide first aid treatment if required
- educate the community about water safety
- place signs or barriers to warn of dangerous conditions or areas and make sure users are aware of potential dangers
- caution people behaving in an unsafe manner and expel those who refuse to cooperate
- report incidents to management or other authorities
- design and implement emergency procedures
- undertake basic water quality control and testing procedures
- maintain rescue equipment
- care for lost children
- perform basic administrative duties such as writing reports.

Lifeguards who work at outdoor venues spend most of their time in conditions that vary from extremely hot to cold and windy.

Personal Requirements

- Enjoy outdoor activities
- Able to cope with the physical demands of the job
- Good communication skills
- Work well in a team environment
- Able to be alert for long periods
- Be of appropriate age as restrictions may apply

Education and Training

To become a pool lifeguard, you usually have to obtain a certificate or licence issued by the Royal Life Saving Society Australia (RLSSA).

To become an ocean lifeguard, you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Additional Information

To obtain an RLSSA certificate or licence, you must hold a current Bronze Medallion Certificate. For full details, contact Surf Life Saving Australia.

Ocean lifeguards must have high levels of swimming and surfing competence, and may be required to hold a current drivers licence and motorised watercraft licence. You may be able to gain the necessary qualifications and certifications by completing a Surf Life Saving Australia Advanced Life Saving Certificate (Gold Medallion).

Pool and ocean lifeguards may also require a National Police Certificate, a Provide First Aid Certificate and a Working with Children Check.

Councils and private commercial contractors ensure that employees meet the minimum qualifications required by the state or territory government.

Employment Opportunities

Pool lifeguards are employed by local councils or by private commercial pool owners. Indoor facilities and some councils retain people all year round, but there are more opportunities for outdoor pool and beach work during the warmer months, or casual work during school holidays and on weekends. Ocean lifeguards are employed by seaside councils or private commercial contractors such as Surf Life Saving Australia and Lifeguarding Services Australia.

Related Jobs

Fitness Instructor (p 263); Paramedic (p 205); Recreation Officer (p 124); Sportsperson (p 271).

Receptionist

Receptionists act as the first point of contact in an organisation, greeting people and attending to enquiries made by phone or in person.

Receptionists:

- greet visitors and telephone callers and find out the nature of their enquiry
- operate telephone switchboards and consoles to connect, hold, transfer and disconnect telephone calls
- provide information to assist clients or refer them to appropriate contacts, either in the organisation or elsewhere
- arrange appointments for callers or for people working in the organisation and keep records of these
- carry out word processing, filing, mail-outs, bookkeeping and banking as required
- send out accounts, receive payments and order stationery and office supplies
- open and deal with incoming mail, and organise outgoing mail and postage
- if working in hotels or motels, make reservations, check guests into and out of the hotel, give information about facilities available and advise visitors about places of interest
- if working in medical clinics, hair and beauty salons or similar places, organise appointments, deal with changes in schedules, present accounts after treatment and handle money
- if working in sales areas, assist with the promotion of products and give prices and details to customers.

Although the range of tasks varies depending on the place of work, the clerical skills involved are similar. Most positions require keyboard and computer skills. Receptionists are expected to be able to present an appropriate image for the organisation and deal competently with the people and problems they encounter. In some areas, such as the hospitality industry, they may be required to work outside normal hours, including weekends and evenings.

Personal Requirements

- Good communication skills
- Able to work neatly and accurately
- Good organisational skills
- Able to work without supervision
- Good presentation and a pleasant manner

Education and Training

You can work as a receptionist without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have qualifications and you may like to consider a VET course. Additional training may be required for work in some fields, such as medicine and hospitality.

As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a receptionist through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Receptionists may work in a variety of organisations, such as medical centres, law and accounting firms, retail and wholesale firms, factories, travel agencies, hotels and motels, hospitals, schools and in professional offices. Experience in a variety of clerical duties may be needed for advancement into other areas of administration. These areas include accounts, data processing, word processing, office administration and secretarial work.

Related Jobs

Administrative Assistant (p 51); Hotel and Motel Front Office Attendant (p 265); Personal Assistant (p 62); Secretary (p 65).

Retail Buyer

Retail buyers purchase goods to be sold in retail stores. They may purchase goods locally, interstate or overseas. In large department stores, buyers may specialise in certain types of merchandise (textiles, fashion, hardware or toys, for example). In a national chain of stores, such specialist buyers may purchase merchandise for all stores or nominate brands to be stocked.

Retail buyers:

- obtain information from store executives, salespeople and sales records data about stock levels and fast-moving and slow-moving goods
- consider which goods will sell well in particular locations and what prices customers are prepared to pay
- research customer demands and trends by processing store sales and inventory reports
- manage and analyse stock levels and order points using computers and statistics
- try to anticipate changes in customer demand for particular goods, as goods must be purchased well before their sale to customers
- inspect, compare and select goods at manufacturers' or agents' premises
- contact suppliers to replenish stocks
- be aware of relevant legal information such as consumer rights and store licensing
- communicate frequently with store management to discuss planning, budgeting, sales promotions and advertising campaigns
- attend trade fairs and other displays interstate and overseas to obtain information about the range of products available.

In small businesses, owners normally do their own retail buying after consultation with their staff.

Personal Requirements

- Enjoy clerical and administrative activities
- Strong analytical skills
- Knowledgeable and interested in the retail market
- Good communication skills
- Good negotiation skills
- Good planning and organisational skills
- Good with numbers
- Willing to travel

Education and Training

You can work as a retail buyer without formal qualifications. You will probably get some informal training on the job. Buyers usually begin as sales staff and are selected for advanced training in retailing. Usually only experienced sales staff are appointed to buying positions.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a retail buyer through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Alternatively, you can become a retail buyer by completing a degree in business, marketing or a related field at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Retail buyers are employed by department stores, retail chains and smaller retail shops. Most large and medium retailers, which are usually located in the capital cities, have teams of buyers. With experience, and sometimes further training, it is possible to become a supervisor or manager. Experienced buyers can also become self-employed, offering their services on a freelance basis.

Related Jobs

Sales Assistant (p 269).

Room Attendant

Also known as Housekeeper

Room attendants clean and maintain rooms in hotels, motels and other places of accommodation.

Room attendants:

- check that rooms have been vacated before cleaning
- make beds daily and change bed linen
- vacuum carpets, floors and upholstery
- clean bathrooms and supply with fresh towels and toiletries
- check and restock tea, coffee, sugar, milk and mini bar supplies
- make sure that televisions, radios, lights and air conditioning equipment are working
- report to a supervisor if articles are left behind by guests, if there is damage to rooms or if any items appear to have been stolen
- take laundry and dry cleaning orders from guests.

Working conditions and hours vary greatly, depending on where room attendants work. The work is not usually physically demanding, but lifting, carrying and bending are involved.

Personal Requirements

- Enjoy practical work
- Neat personal appearance
- Good personal hygiene
- Honest and reliable

- Able to cope with the physical demands of the job
- Able to stay calm in difficult situations

Education and Training

You can work as a room attendant without formal qualifications. You will probably get some informal training on the job.

You can also become a room attendant through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Room attendants are employed by individual hotels, motels or guest houses, or by companies that operate a chain of establishments. Most room attendants work in capital cities and surrounding suburbs or in country centres where there are tourist resorts. Demand for room attendants depends on growth in the tourism and travel industries. As turnover is relatively high, there is generally a constant demand to replace those leaving the job. With experience, and sometimes further training, it is possible to progress to supervisory levels and to the position of executive housekeeper.

Related Jobs

Cleaner (p 259).

Sales Assistant

Sales assistants sell goods to customers in retail and wholesale establishments.

Sales assistants:

- advise customers on the location, selection, price, delivery, use and care of goods available from the store, with the aim of encouraging them to buy and to return to buy in the future
- operate cash registers and accept payment, or prepare finance arrangements (invoices and contracts, for example)
- take special orders for items not currently in stock, or not normally stocked, and notify customers when the items have arrived
- package goods for customers and arrange delivery
- price, stack and display items for sale and keep the store tidy and attractive
- be aware of health, safety and welfare issues and practices
- participate in stocktaking (counting and describing the goods in stock)
- arrange for the repair of damaged goods or advise on necessary repairs
- order items.

Some sales assistants work on a commission basis, which means that they are paid for each product, or number of products, that they sell. Sales assistants are on their feet most of the day attending to customers, finalising sales and tidying display units. They may work long hours and be required to work at night and on weekends. Managers establish a roster to determine work hours for staff. In most workplaces you will need to use computer systems for sales or payment processing.

Personal Requirements

- Enjoy working with people
- A helpful, courteous manner
- Neat personal appearance
- Good communication skills
- Able to deal accurately with money
- Motivation and drive
- No skin disorders if working with food
- Good problem-solving skills
- Willing to work as part of a team

Education and Training

You can work as a sales assistant without formal qualifications. You will probably get some informal training on the job.

You can also become a sales assistant through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

The retail industry employs large numbers with a high staff turnover. There is potential for advancement in retailing for those showing initiative, enthusiasm and willingness to learn.

Related Jobs

Bicycle Technician (p 277); Florist (p 295); Gaming Worker (p 264); Interior Decorator (p 105); Pharmacist (p 216); Postal Employee (p 161); Retail Buyer (p 268); Sales Representative (p 65).

Sports Administrator

Sports administrators manage sports clubs, associations and peak bodies, undertaking activities such as promoting their sport, obtaining corporate sponsorship and refining the rules and structure. Sports administrators usually work with a voluntary board or committee to develop strategies and programmes to achieve the aims and policies of the club, association or peak body.

Sports administrators:

- talk to members, fans and stakeholders, conducting research to determine their needs
- develop programs and services that meet the needs of members, fans and stakeholders
- consult widely to develop short-term and long-term business plans for their sport
- supervise the design, planning and maintenance of sport and recreation facilities
- plan and organise sporting and other related events
- supervise office, facility and/or program staff and volunteers
- identify staff training needs
- coordinate the business activities of a sport or club
- report to various committees and/or government agencies
- plan and oversee promotional and marketing activities
- secure funding and prepare, implement and monitor budgets.

Personal Requirements

- A strong interest in sport and recreation
- Good communication and interpersonal skills
- Sound business ability
- Willingness to travel and work irregular hours, including evenings and weekends

Education and Training

To become a sports administrator you usually have to complete a degree in sports management at university. You could also consider degrees in sport development, commerce, business

or management. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology and chemistry are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

A strong background in sport (such as that gained as a sports coach or sportsperson) may also be an advantage, especially if you undertake one of the general degrees listed above.

Employment Opportunities

At the local level, sport in Australia has traditionally been administered by unpaid volunteers. Since sport has become more complex and businesslike, more clubs, associations and organisations are appointing trained professional administrators. Sports administrators are employed mostly by sporting clubs, associations and organising bodies. Generally, employment with smaller sports bodies is on a part-time basis.

Related Jobs

Recreation Officer (p 124); Sports Coach (p 270).

Sports Coach

Medium skill

Very strong

Sports coaches teach individuals and teams how to improve the way they play and practise their sport by analysing their performances, instructing them in relevant skills, providing motivation and enhancing their capabilities.

Sports coaches:

- observe individuals' performances to determine the level of instruction required
- teach techniques to help sportspeople acquire additional skills or improve existing skills
- supervise practice sessions
- plan training programs
- supervise athletes' physical development
- organise and liaise with sports science support staff
- arrange entries into competitions
- plan and direct game strategy, sometimes in consultation with club officials
- analyse the progress of games or competitions and give signals and instructions to players
- carry out post-competition analysis of performance and evaluate strategy
- undertake related administrative tasks such as booking venues, organising tours and budgeting
- travel with individuals and teams to competitions
- recruit players and other coaching staff.

Sports coaches operate on a professional (paid) or honorary (unpaid) basis. They usually specialise in a particular sport. The degree of personal proficiency required to coach a sport varies widely, and can include experience as a voluntary junior coach through to an elite coach of a highly commercialised sport.

Personal Requirements

- Thorough understanding of preferred sport
- Good communication skills
- Good interpersonal skills
- Enthusiastic, disciplined and dedicated
- Flexible and innovative
- Prepared to travel and to work long hours, evenings and weekends

Education and Training

You can work as a sports coach without formal qualifications. Each sport has its own coach qualification framework managed by the state and/or national governing body. Entry to this occupation may be improved if you have a background in the specific sport and/or have qualifications in a relevant discipline. You may like to consider a VET course. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a sports coach through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Alternatively, you can become a sports coach by completing a degree in sports coaching, sport development, exercise and sports science, sport management or human movement. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry or physics are normally required. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

It is recommended that coaches become accredited. The National Coaching Accreditation Scheme (NCAS), coordinated by the Australian Sports Commission (www.ausport.gov.au), offers education, training and accreditation to coaches. NCAS training programs include components for both general coaching principles and sport-specific skills, techniques and strategies. These programs are available in more than 70 sports, providing the industry-standard qualification for coaches.

Employment Opportunities

There are limited full-time positions for professional sports coaches. Coaches are employed by sporting clubs and associations, government agencies, government-funded centres (such as the Australian Institute of Sport, state, territory or regional institutes or academies of sport), holiday resorts and centres specialising in particular sports (such as horse-riding schools), swimming centres, health clubs, community institutions and educational institutions (schools and tertiary, for example). In some sports, coaches may be self-employed in a sports training centre that they own or lease. Many sports coaches also work on a voluntary basis.

There are sports that have coaching development officers who are responsible for coordinating the many part-time and voluntary coaches who contribute to the sport. Job opportunities depend on the number of people playing various sports, corporate sponsorship and media coverage of sporting events, the performance of Australian sporting teams and individuals and the level of community interest/involvement in these performances. Other factors include the acceptance of sports as part of a healthy lifestyle, the amount of money available to sporting clubs, the effectiveness of sports promotion, as well as the trend towards professionalism in many sports, including football, basketball, baseball, netball, hockey and soccer.

Related Jobs

Exercise Scientist (p 173); Teacher - Physical Education (p 127).

Sportsperson

Also known as Athlete

Professional sportspeople earn all or part of their living through participating in sporting events, either as individuals or as members of a team. Professional sportspeople usually specialise in one sport, such as Australian Rules Football, basketball, boxing, cricket, golf, netball, rugby league, soccer, swimming, tennis and many others, although some may take part in more than one.

Professional sportspeople:

- maintain a high degree of expertise in their particular sport
- attend regular practice sessions and undertake private training to maintain the required standard of fitness
- take part in scheduled sporting competitions
- repair sporting equipment or organise its repair
- undertake sports promotional activities, demonstrations and television appearances
- coach individuals, groups and/or teams by demonstrating techniques and supervising practice.

Most sportspeople compete as amateurs (unpaid) until they reach a sufficiently high standard to be offered payment for their performance.

Personal Requirements

- Physically fit
- Dedicated to attaining and maintaining a high standard of skill and endurance in a particular sport
- Good communication skills for promotional work
- Willing to travel

Education and Training

You can work as a sportsperson without formal qualifications. However, a high level of expertise in your chosen sport is essential. Sportspeople in a team sport will come under the guidance of a coach whose job it is to develop and refine their skills. Individual sportspeople usually find a coach to assist them to reach elite level. Sportspeople who are still at school may elect to develop their skills by attending a specialist sports high school that combines traditional school subjects with specialist sports coaching and competition in a wide range of sports.

Many sporting organisations offer traineeships to potential top-level sportspeople in specific sports. Training is also available in related areas such as coaching, sport development, refereeing/umpiring and sports administration.

Sportspeople may study courses in sports-related areas such as sports science, human movement studies, physiotherapy, sports administration, sports coaching, sports journalism, physical education and sports psychology. However, such studies are not essential for employment as a professional sportsperson. Subjects and prerequisites can vary between institutions, so visit www.gooduniversitiesguide.com.au for further details.

Additional Information

National Sporting Organisations (NSOs) offer scholarships to enable elite sportspeople to live and train, sometimes in association with the Australian Sports Commission in Canberra. The Australian Sports Commission offers a range of sports programs, covering many different sports, including a limited number to athletes with disabilities. Some athletes may have the opportunity to train overseas.

Employment Opportunities

In all areas of sport, the number of top professional and amateur competitors is very small compared to the number of people aspiring to compete at a professional level. Earnings from sport for professional sportspeople depend on the individual's ability and the public popularity of the sport. Depending on the sport, playing careers for sportspeople generally last no more than a few years. Accomplished sportspeople may progress to employment as coaches, trainers, administrators or media personalities after retiring from their playing careers. Others may go into business ventures relating to sport, such as marketing sporting equipment or clothing, or managing other sportspeople. Some pursue careers they have established in other areas.

Related Jobs

Dancer (p 98); Fitness Instructor (p 263); Lifeguard (p 267); Sports Administrator (p 269); Sports Coach (p 270); Stunt Performer (p 112); Teacher - Physical Education (p 127).

Tour Guide

Tour guides accompany visitors on local tours and guide tourists within a specific country, region, area, city or site. They provide special information on history, archaeology, monuments and works of art, the environment, culture, natural and built attractions, places of interest, and any general matters of interest to the visitor.

Tour guides:

- meet members of a tour on arrival and make introductions
- coordinate pre-arranged accommodation and transport and make sure that tour members are comfortable
- lead tour groups, drive coaches or limousines, advise tour members of local interest points, and prepare and present tour commentaries
- coordinate pre-arranged tour activities such as visits to local attractions, restaurants or shops, train rides, cruises, extended tours, white water rafting, bushwalking and mountaineering
- research and share general information on Australian Indigenous cultures
- attend to operational problems such as booking errors and amendments, lost luggage or illness
- provide first aid if needed
- keep in touch with transportation companies
- maintain written reports of daily activities and carry out other administrative work.

Being a tour guide is often physically demanding. During a tour, guides must be available at all times to answer questions and sort out problems. Manual work such as loading or unloading baggage or other equipment may be required.

Tour guides are often required to spend time away from home, especially those fulfilling the role of tour manager.

Personal Requirements

- Mature
- Able to accept responsibility
- Patient and tactful
- Understanding and acceptance of different cultures
- Good organisational skills
- Excellent general knowledge of Australia and regional touring areas
- Problem-solving skills and ability to think logically
- Excellent communication and negotiation skills
- Able to cope with the physical demands of the job

Education and Training

You can work as a tour guide without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have qualifications and you may like to consider a VET course. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a tour guide through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Entry to this occupation may also be improved if you have relevant experience in the hospitality or tourism industries.

Additional Information

Companies that specialise in ecotourism or nature-based tourism may require tour guides to hold a diploma or degree in science, ecotourism or a similar subject. First aid qualifications are generally required by employers. Age limits may also apply.

Employment Opportunities

Most tour guides work casually on a contract or part-time basis, as employment tends to be seasonal. There are some opportunities for self-employment as a tour operator, tour manager or tour guide supervisor who trains tour guides. Some tour guides work at specific attractions such as museums, cultural centres, theme parks and sporting facilities.

Fluency in languages other than English is highly desirable. There is often demand for tour guides who can speak Japanese, Korean, Mandarin, French and Italian.

Related Jobs

Museum Attendant (p 189).

Tourist Information Officer

$1,318 | Lower skill | Moderate

Also known as Tourist Adviser and Visitor Information Officer

Tourist information officers provide travel, hospitality and accommodation information to tourists, promote tourism, and assess tourist opportunities for local communities.

Tourist information officers:

- answer questions from tourists, visitors, local residents and other tourism industry colleagues, in person, over the phone, via email or online
- make suggestions on tours, travel routes, accommodation and local attractions
- provide literature and information on local, interstate and international tours and places of interest
- maintain literature and brochure stocks
- sell souvenirs and other merchandise
- discuss transport, accommodation and tour availability and cost
- arrange bookings and documentation for travel and accommodation, and collect payment
- assist travel agents and tour operators in preparing itineraries for tourists
- undertake general clerical and office duties
- coordinate volunteer or part-time staff
- put together statistics concerning the number and nature of enquiries
- be responsible for overall presentation of the information centre.

Personal Requirements

- Enjoy working with people
- Good interpersonal, communication and customer service skills
- Good organisational skills
- Comfortable working with computers
- Good geographical knowledge

Education and Training

You can work as a tourist information officer without formal qualifications. You will probably get some informal training on the job. You can also become a tourist information officer through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

A highly desirable skill amongst tourist information officers is the ability to speak a second language. Most people are expected to have a strong retail background or qualifications in hospitality and tourism.

Tourist information officers have to be familiar with all the tour operators and the various attractions and services in their region. As part of ongoing training, they take part in industry familiarisations, going to hotels or motels to personally rate the accommodation.

Employment Opportunities

Tourist information officers are employed in a wide range of agencies in the tourism and hospitality industry, and in private and government organisations involved in tourist promotion, planning and development. Tourism officers can be involved in providing information on and promoting travel to the local area, the state or international destinations.

Despite tourism being important in the Australian economy, some small tourist information centres are staffed by volunteers and do not hire professional staff. Some larger centres are broadening their scope and employing staff with higher levels of training.

Related Jobs

Museum Attendant (p 189); Tour Guide (p 271); Travel Consultant (p 273).

Track Rider

$1,548 | Medium skill | Very strong

Track riders exercise racehorses on behalf of horse trainers so that they may be fit for racing.

Track riders:

- follow an exercise training program laid out by the horse trainer
- walk, gallop and trot horses regularly, according to the training program
- make reports to the trainer on horses' progress and performance
- monitor horses' health and temperament and report signs of injury and illness
- perform stable duties such as washing, feeding and saddling horses.

Track riders often work early mornings in order to avoid the heat of the day. They may also work weekend and afternoon shifts. Many work in part-time positions for multiple employers.

Personal Requirements

- Enjoy working with horses

- Able to cope with the physical demands of the job
- Light build
- Good communication skills
- Enjoy outdoor work

Education and Training

To become a track rider you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a track rider through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

You must be licensed in order to work as a track rider. To qualify for a licence, you must undergo a medical assessment. You may also be required to fulfill training requirements and obtain a National Police Certificate.

Employment Opportunities

Track riders are employed by horse trainers and may find work at racetracks around Australia. There are also opportunities for freelance work as many track riders work for more than one employer.

Related Jobs

Animal Technician (p 232); Jockey (p 266); Stablehand (p 38).

Travel Consultant

Travel consultants provide information, advice and booking services for people wishing to travel. Travel consultants in large organisations may specialise in particular areas such as business, international or domestic travel.

Travel consultants:

- provide literature and information to clients concerning local, interstate and international tours, travel routes, accommodation, local customs, fares, and travel regulations
- discuss client requirements and advise on suitable options
- plan, prepare and cost itineraries (travel plans) for clients
- make travel, accommodation and related bookings
- confirm bookings and notify clients of luggage limits and insurance, medical, passport, visa and currency requirements
- issue tickets for travel, accommodation vouchers and all relevant documentation
- collect payments and maintain records of transactions
- assist with changes to travel arrangements and bookings where required.

Ongoing learning is important to those working in the industry. Most travel consultants work on a commission basis. They work long hours including weekends, often working 10-hour days. Travel consultants may also work in call centres.

Personal Requirements

- Good communication skills
- Strong customer focus
- Good organisational skills
- Strong computer and written skills
- Able to work as part of a team
- High level of personal presentation
- Able to work under pressure
- Enjoy working with people
- Strong sales focus

Education and Training

You can work as a travel consultant without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have qualifications, skills or experience in office work, retail or tourism. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a travel consultant through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Knowledge of a second language is highly desirable. Most people in the travel industry have also travelled extensively.

Employment Opportunities

Travel consultants are employed by travel agencies, government tourist bureaus, tourism wholesalers and airline and shipping companies. Some travel consultants set up their own businesses. Job opportunities depend on the level of tourism activity.

Related Jobs

Tour Guide (p 271); Tourist Information Officer (p 272).

Waiter

Waiters serve food and drinks to guests in hotels, restaurants, clubs and similar establishments.

Waiters:

- take restaurant reservations
- set tables with clean linen or place mats, cutlery, crockery and glasses
- welcome and seat customers and hand menus to them
- talk to guests about the menu and drinks and recommend combinations
- in some cases promote local produce and attractions to visitors from interstate and overseas
- take customers' orders and pass them to kitchen staff or bar attendants
- serve food and drinks
- carve meat
- make up bills and present them to customers
- handle money or credit cards
- clear tables and return dishes and cutlery to kitchens.

Waiters often work split shifts and in the evenings, and on weekends and public holidays. They spend long periods on their feet and may have to deal with difficult customers. Uniforms may be supplied by employers.

Personal Requirements

- Neat personal appearance
- A high level of personal hygiene
- Good communication skills
- Good memory
- Polite and patient
- Friendly and efficient

- Enjoy working with people
- Able to work as part of a team
- Able to handle money
- Able to cope with the physical demands of the job

Education and Training

You can work as a waiter without formal qualifications. You will probably get some informal training on the job. You can also become a waiter through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

To serve, sell or offer liquor, you must have a Responsible Service of Alcohol (RSA) certificate. RSA courses are widely offered by TAFE institutes and Registered Training Organisations.

Employment Opportunities

Waiters work in hotels, motels, restaurants, clubs, recreation and convention centres and other entertainment venues. Most waiters are employed in cities, although many work in larger country centres where there are tourist resorts. Waiters who have undertaken appropriate training or who have suitable experience are highly regarded by employers. A trainee may commence as a commis waiter. Skilled waiters may be promoted to maitre d', restaurant manager and food and beverage manager positions. As turnover is high in this occupation, there is usually a steady demand for replacement staff.

Related Jobs

Bar Attendant (p 256); Barista (p 257); Flight Attendant (p 264).

Winery Worker

Also known as Cellarhand and Vineyard Hand

Winery workers are involved in growing grapes and making, bottling, warehousing, packaging, distributing and selling wine in Australia and overseas.

Winery workers:

- prepare soil, plant vines and cultivate and fertilise crops
- construct wire trellises to support vines and fruit
- control weeds, diseases and pests
- assist in making wine by operating equipment to crush and ferment the grapes
- assist in bottle fermentation by twining (turning the bottles) and re-topping during the process (for sparkling wines)
- operate equipment to clarify and filter wine
- make additions to wine, and blend and transfer wine during maturation
- prepare wine for bottling
- assist with barrel work and racking
- assist with bottling, corking and general cleaning
- assist in forwarding export orders
- operate cellar door, including sales and administration.

A winery worker may be involved in all aspects of vineyard and cellar work or may specialise in one or more areas, such as cellar work, bottling, laboratory work, vineyard work, warehousing and packing, cellar door sales or export orders, depending on the size and type of winery.

Personal Requirements

- Enjoy practical activities
- Able to undertake manual work
- Able to work quickly and reliably
- Good with numbers
- Good oral and written communication skills
- Safety-conscious

Education and Training

You can work as a winery worker without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have relevant qualifications and you may like to consider a VET course. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a winery worker through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Most employment is in NSW, SA, Victoria and WA, with smaller wine industries present in Queensland and Tasmania. Wineries vary in size from small operations (perhaps family-owned) to large companies employing many people. Most positions for winery workers are seasonal and on a casual basis, with the strongest demand over the pruning and harvesting periods in the above-mentioned states. Formal training will enhance your long-term career prospects. Employment for cellar door attendants is linked to the wine tourism industry.

Related Jobs

Bar Attendant (p 256); Food Process Worker (p 295); Viticulturist (p 39); Winemaker (p 39).

Trades & services

If you enjoy practical, hands-on tasks and working with people, then a career in trades and services could be for you. A career in this field could see you using specialised tools and machinery to create new things — bringing technical concepts to life — or providing professional services to the public. Demand in this field is likely to be ongoing due to its integral role in society.

Courses and specialisations

Trades

Training and study include apprenticeships and traineeships, preparing you to be a tradesperson in a specific field. Some of the more popular specialisations include electrician, plumber, glass and glazing, manufacturing and construction. Students usually need to have reached a study equivalent of Year 10 to apply, but pathway options are available. There may also be the opportunity to build on your qualifications and experience to gain advanced qualifications for supervisory or management roles.

Services

Specialisations in the services field include body services, such as beauty therapy, hairdressing and make-up artistry, and service for key life events, such as civil marriage ceremonies and funeral arrangements. A VET qualification, such as a certificate IV or diploma, is generally required.

Where to study

By combining practical work with structured training, students gain a recognised VET qualification and theoretical knowledge while working in the industry. Due to the demand for workers in trades and services, course and employment are available Australia-wide at TAFEs, Registered Training Organisations and selected universities. Regional employment is quite common, as are courses — this is especially apparent for trades workers. The facilities that each institution offer may be an important part of your decision-making process.

Please note: University ratings have not been included for careers in trades and services due to the careers' diverse and vocationally oriented nature.

Automotive Air Conditioning Fitter

Also known as Automotive Air Conditioning Specialist and Automotive Airconditioning Fitter

Automotive air conditioning fitters install and repair air conditioning units in various types of vehicles and machinery, such as cars, trucks, vans and tractors.

Automotive air conditioning fitters:

- install, fit and connect the unit to the electrical wiring and engine
- fill the unit with refrigerant and test it for leaks and malfunctions
- carry out maintenance work on existing units, including testing, fault finding, dismantling, repair or replacement of faulty parts, reassembly and final testing.

Most of the work is done in a workshop.

Personal Requirements

- Enjoy practical and manual activities
- Good hand-eye coordination
- Aptitude for mechanical work
- Able to keep up to date with technological change
- Problem-solving skills.

Education and Training

To become an automotive air conditioning fitter you usually have to complete a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

National environmental legislation requires those who work with refrigerant chemicals to possess special handling and/or trading licences issued by the Australian Refrigeration Council (www.arctick.org).

Once you are employed, you may be able to develop, and have recognised, additional skills under the Automotive Industry Retail, Service and Repair Training Package that will expand your career opportunities within this industry. see the Learning pathways section for more information.

Employment Opportunities

Automotive air conditioning fitters usually work in specialised workshops. They may specialise in the installation, repair and servicing of passenger cars, trucks, buses and coaches, or other heavy vehicles. They may also work for motor vehicle dealers, the minerals industry, public works and transport, private firms with large fleets of vehicles, and defence, communications and energy supply authorities. Some automotive air conditioning fitters establish their own businesses.

Automotive Electrician

Medium skill Stable

Also known as Automotive Electrical Mechanic and Car Electrician

Automotive electricians install, maintain, identify faults and repair electrical wiring and computer-based equipment in motor vehicles and related equipment, such as caravans, trailers, earthmoving equipment, mining equipment, marine applications and agricultural equipment.

Automotive electricians:

- work with computer-controlled engine management systems
- service, identify and repair faults on electronically controlled vehicle systems such as electronic fuel injection, electronic ignition, anti-lock braking, cruise control, automatic transmission, airbags and air conditioning
- install electrical equipment such as gauges, lighting, alternators and starter motors in vehicles
- install electrically operated accessories such as radios, heating or demisting equipment, air conditioners, driving lamps and anti-theft systems
- refer to circuit diagrams, and use meters and test instruments to find electrical faults
- adjust engine control systems and timing to ensure vehicles are running at peak performance
- test, recondition and replace faulty alternators, generators, starter motors and related items such as voltage regulators and batteries
- repair or replace faulty ignition, electrical wiring, fuses, lamps and switches
- use hand tools, specialised electrical tools, instruments and machines, including drills, grinders, presses and lathes
- solder or weld when repairing electrical parts
- sell and install electrical parts and accessories
- install, repair and service air conditioning systems.

Automotive electricians are usually required to wear protective clothing. They may have contact with customers.

Personal Requirements

- Enjoy practical and manual activities
- Good eyesight and normal colour vision
- Good hand-eye coordination
- Able to approach work in a systematic and thorough way
- Able to keep up to date with technological changes
- Aptitude for technical activities

Education and Training

To become an automotive electrician you usually have to complete an apprenticeship in Automotive Electrical Technology. Entry requirements may vary, but employers generally require Year 10.

Additional Information

After completing your apprenticeship, you will need to apply for a licence to perform electrical work.

Employment Opportunities

Automotive electricians work for automotive electrical specialists, motor vehicle repairers, large transport firms and vehicle dealerships. They may work either in motor vehicles themselves, at workbenches repairing parts, or providing mobile and roadside repairs.

With the increasing use of electronically controlled systems, regularly updating skills and knowledge is essential. Computerised diagnostic equipment training and expertise in advancing systems (such as electronic fuel injection and vehicle management) are also very important.

Related Jobs

Motor Mechanic - Car (p 308).

Barber

$1,739 Very high skill Strong

Barbers wash, cut and style men's hair and groom facial hair. In most barbershops, the senior barbers and the more advanced apprentices cut and style hair, while the junior apprentices undertake routine tasks in the initial stages of employment, assisting with washing clients' hair, maintaining equipment, store cleaning, and performing customer service duties. As apprentices gain experience they carry out more complex tasks under supervision.

Barbers:

- talk to clients about their requirements
- cut hair using clippers, scissors or razors
- shampoo, condition and rinse hair
- dry hair and style it
- shave and trim beards and moustaches
- advise clients on hair care
- keep up to date with new products and techniques
- operate a cash register and computer
- perform reception duties such as answering telephone calls and making appointments
- sell retail products
- maintain client records
- clean the barbershop, work areas and equipment.

Barbers are generally employed in men's barbershops. Their days are spent on their feet and working hours are coordinated with the shop's opening times, which often include weekends and a late night during the week.

Personal Requirements

- Enjoy working with people
- Strong communication skills
- Able to work under pressure
- Good hand-eye coordination
- Patient
- Creative and passionate
- Good attention to detail

Education and Training

To become a barber, you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

You can also become a barber by completing a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Employment Opportunities

Most barbers are employed in barbershops. Barbering has had a resurgence in recent years and attracts both men and women to the industry. It generally offers a different work environment to general hairdressing, with the clientele predominantly male.

Those with good retail skills (selling products or additional treatments) are particularly in demand. Many barbers, after a number of years working in the industry, set up their own businesses, enter into partnerships or train apprentices.

Related Jobs

Hairdresser (p 299).

Beauty Therapist

Beauty therapists apply face and body treatments, and provide advice about skin care and cosmetics.

Beauty therapists:

- carry out skin analysis and give advice about skin and body care
- perform facial or body massage and aromatherapy treatment
- analyse body type and advise on exercise programs and nutrition
- use a variety of treatments and electrical equipment to treat skin and body conditions
- remove facial and body hair by electrolysis or waxing
- provide advice and support to clients following cosmetic surgery
- recognise problems and refer clients to medical practitioners such as dermatologists, plastic surgeons, endocrinologists, podiatrists, chiropractors and physiotherapists
- apply make-up
- perform manicures, pedicures, nail extensions and eyelash and brow tinting
- perform reception duties (such as receiving bookings and arranging appointments)
- maintain client records
- provide advice about and sell cosmetic products and related beauty equipment.

Specialisations

- Beautician
- Beauty Consultant

Personal Requirements

- Neat personal appearance at all times
- No allergies to beauty products
- Pleasant and tactful when dealing with customers
- Interest in people
- Good hand-eye coordination
- Sensitive when dealing with clients for body and facial treatments

Education and Training

To become a beauty therapist you usually have to complete a VET qualification in beauty therapy. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a beauty therapist through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Before selecting a course, check with a number of potential employers to make sure that the course meets their requirements. Employers are less likely to consider people who have completed a short course or who have qualifications that are not recognised by the industry. Beauty therapists with nationally accredited qualifications may work throughout Australia.

Working as a sales assistant in a pharmacy or retail store can provide relevant experience and familiarity with products for those wishing to train as beauticians or beauty therapists.

Employment Opportunities

Beauty therapists work mainly in private salons and hairdressing establishments, and many are self-employed. Some beauty therapists are employed by cosmetic companies to work in large department stores that have sections specialising in skin care and cosmetics.

Related Jobs

Hairdresser (p 299); Make-up Artist (p 106); Massage Therapist (p 175); Nail Technician (p 308).

Bicycle Technician

Also known as Bicycle Mechanic and Bicycle Repairer

Bicycle technicians repair, service and assemble bicycles.

Bicycle technicians:

- speak with customers
- assemble packaged bicycles ready for sale
- inspect, repair and service customers' bicycles
- fabricate components and equipment
- diagnose faults and road test bicycles before and after performing mechanical procedures
- perform various retail functions, including maintenance of stock control systems and shop presentation.

Personal Requirements

- Enjoy practical and manual activities
- Able to cope with the physical demands of the job
- Normal eyesight and hearing
- Mechanical aptitude
- Good communication skills
- Problem-solving skills

Education and Training

You can work as a bicycle technician without formal qualifications. You will probably get some informal training on the job.

You can also become a bicycle technician through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Bicycle technicians may work in a variety of businesses, including retailers, wholesalers, suppliers, manufacturers, equipment hirers, race teams and tour companies. With the increasing popularity of cycling, and the increasing complexity and cost of bicycles, employers often seek trained and qualified employees. Employment may be on a full-time or part-time basis and may include seasonal work over summer.

Related Jobs

Sales Assistant (p 269).

Binder and Finisher

$1,020 Medium skill Decline

Also known as Book Binder and Print Finisher

Binders and finishers fold, collate, stitch, trim, cover and embellish a range of printed and non-printed products by hand or machine.

Binders and finishers:

- process sheets of printed material by assembling the sheets, trimming them to size using automated guillotines and then folding the sheets using mechanised folders
- set up and prepare bookbinding and finishing machines, which assemble pages or attach covers to books
- prepare and apply the pastes and glues needed to hold books together (if binding books by hand), glue or sew the pages into place and 'build' the cover around each individual book, often using cloths, leathers and fine papers
- repair damaged bindings.

Personal Requirements

- Enjoy practical and manual activities
- Good eyesight (may be corrected)
- Good hand-eye coordination
- Able to cope with the physical demands of the job
- Mechanical aptitude
- Good communication skills
- Able to work as part of a team
- Able to pay attention to detail.

Education and Training

To become a binder and finisher you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Most binders and finishers are employed by printing firms or specialist binding and finishing companies. There may be some opportunities for self-employment.

Bricklayer

$2,070 Medium skill Stable

Bricklayers lay bricks, concrete blocks and building blocks in mortar to construct and repair internal and external walls, partitions, arches and other structures.

Bricklayers:

- work from plans and specifications
- build in door and window frames
- spread layers of mortar to serve as a base and binder for bricks, and remove excess mortar
- check vertical and horizontal alignment of bricks and blocks
- use various tools and brick-cutting machines to cut and shape bricks
- construct arches and ornamental brickwork
- repair and maintain clay bricks, cement blocks/bricks and related structures
- erect scaffolding (subject to licence requirements in some states and territories).

Bricklayers mainly work outdoors and may have to work at heights. In specialised work they may operate in tunnels and shafts. They usually work in teams. Bricklayers work mainly for builders and may have some contact with the public.

Personal Requirements

- Enjoy practical work
- Good hand-eye coordination
- Able to perform technical activities
- Able to interpret and follow plans
- Able to cope with the physical demands of the job

Education and Training

To become a bricklayer you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

In some states and territories, bricklayers must either be accredited as, or work under the supervision of, a registered building practitioner. Workers in the construction industry must undergo safety induction training and be issued with a Construction Induction Card (CIC).

Employment Opportunities

Most work is in housing and commercial construction on a self-employed, subcontracted basis. Supply and demand can change quickly due to market conditions within the building industry. Qualified tradespeople are less likely to be affected by downturns in demand than unqualified bricklayers. Employment may be sought with bricklaying contractors and general building contractors. By undertaking further studies, experienced tradespeople may be promoted to supervisory positions. They can also advance to other positions within the building industry such as building inspector, building estimator, project manager or registered builder.

Related Jobs

Builder (p 278); Carpenter (p 282); Concreter (p 285); Construction Worker (p 286); Roofer (p 317); Wall and Ceiling Liner (p 331).

Builder

$3,450 Very high skill Strong

Builders coordinate the construction of dwellings and other structures.

Builders:

- examine and interpret clients' plans or arrange the drawing of plans to meet building regulations
- submit tenders (offers to do jobs at a stated price), quotes or prices for a project to clients
- arrange the submission of plans to local authorities for approval and arrange inspections of building work
- organise employees and/or subcontractors to carry out all stages of building and negotiate rates of pay
- calculate quantities of materials required for building projects and order these from building suppliers or advertise for tenders
- arrange delivery times of materials to coincide with various stages of the building process
- supervise the work of employees and/or subcontractors to ensure buildings are of an acceptable standard and are proceeding according to the contract requirements and program schedule

- coordinate the activities of office staff involved in the preparation and payment of accounts
- comply with state and federal legal statutory contract law.

Personal Requirements

- Good communication and interpersonal skills
- Management and leadership skills
- Good planning and organisational skills
- Aptitude for technical activities

Education and Training

To become a builder, you usually have to complete a VET qualification in building and construction. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information. You can also become a builder by studying construction management or building at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

In some states and territories, builder must either be registered as, or work under the supervision of, a registered building practitioner. To be registered you must have completed training and have relevant industry experience. All those who work in the construction industry must undergo safety induction training and be issued with a Construction Induction Card (CIC). Those with appropriate building qualifications may be eligible to become members of the Australian Institute of Building.

Employment Opportunities

Most builders are self-employed as sole proprietors, work as partners in small companies or work as company directors in larger firms. Builders may specialise in one area of construction (such as new homes, extensions and renovations of established homes or commercial building construction). Most work is available in the metropolitan area, although there are some opportunities to work in country areas, particularly in centres of mining activity. Due to variations in industry demand, employment opportunities are subject to change. In periods of low activity, builders with a trade qualification may seek alternative employment in their original trade area.

Related Jobs

Architect (p 43); Architectural Draftsperson (p 43); Building Surveyor (p 44); Carpenter (p 282); Civil Engineer (p 138); Roofer (p 317).

Building Labourer

Also known as Builder's Labourer and Earthmoving Labourer

Building labourers assist building and construction personnel by erecting, repairing and dismantling structures and facilities.

Building labourers:

- Construct and dismantle temporary amenities such as barricades and scaffolding
- Handle and transport building and construction materials, tools and equipment around building sites
- Mix, pour and spread building materials such as concrete, plaster and mortar
- Excavate clearing and levelling sites by digging holes and operating building and construction machinery
- Spread and level asphalt, soil and sand on paths, driveways, roads and other locations

Building labourers work on building and construction sites. They are required to work in a range of weather conditions, including hot and dusty environments. They tend to work regular hours, but may also be required to work additional hours at busy times. Building labourers often travel locally to building sites, but they may be required to work at a different site each day.

Personal Requirements

- Good communication and interpersonal skills
- Physical strength and stamina
- Deadline-orientated
- Good problem solving skills
- Ability to work in a team

Education and Training

A Year 10 certificate, Certificate I or on-the-job training is sometimes needed but not generally required to become a building labourer. Alternatively, you can complete a traineeship during or after secondary school to work in this job.

Additional Information

Workers in the construction industry are required to complete safety induction training and be issued with a Construction Induction Card (CIC).

Employment Opportunities

Building labourers can work across a range of industries in many locations. Most employment prospects are in local government bodies, assisting in the construction of buildings, roads and paths. Building labourers can also be employed in the residential construction sector.

Bus Driver

Bus drivers transport passengers over established or special routes and on chartered journeys or tours.

Bus drivers:

- stop at designated locations to pick up or set down passengers
- adhere to set bus timetables and routes
- open and close doors before and after passengers board or disembark
- control lighting, heating and ventilation on buses
- collect fares, give change and issue tickets
- advise passengers on destinations
- use a public address (PA) system to provide information or tour commentaries to passengers.

Bus drivers are required to wear uniforms and must be willing to work shifts. Contact with the public is an important part of the job.

Personal Requirements

- Courteous and helpful when dealing with the public
- Able to pass a company or government medical examination, including eyesight and colour vision tests
- Responsible attitude

Education and Training

You can work as a bus driver without formal qualifications, but employers usually require Year 10. You will probably get some informal training on the job. To become a bus driver, you need to obtain the appropriate drivers licence and any special accreditation required by your state or territory. You may also need to undergo medical and eyesight tests, provide a current

National Police Certificate, complete additional training, supply character references and have a satisfactory driving record. Contact the transport department in your state or territory for more information. You can also become a bus driver through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Bus drivers are employed by scheduled bus, charter and coach services. The majority of work is full time, with some casual and part-time employment and shiftwork also available. With experience, and sometimes further training, there may be opportunities for bus drivers to move into supervisory or higher administrative positions.

Related Jobs

Driving Instructor (p 289); Furniture Removalist (p 297); Train Driver (p 328); Truck Driver (p 329).

Business Equipment Technician

Business equipment technicians install, commission, maintain, repair and service computers, document centres, fax machines, photocopiers, cash registers and other electronic commercial and office machines. They may also undertake networking of devices.

Business equipment technicians:

- carry out regular inspections and maintenance of machines to prevent breakdowns
- refer to manufacturers' service manuals
- talk to machine operators to assess faults
- find faults in electrical and electronic machines by using special instruments such as voltmeters, resistance meters and oscilloscopes, and repair or replace faulty parts or wiring
- reassemble equipment and test it to determine whether it is working properly
- advise users of correct operating methods to prevent breakdowns
- keep accurate records and documentation as required.

Business equipment technicians work in repair workshops or travel to clients' offices. They may need to lift heavy equipment.

Personal Requirements

- Enjoy working with electrical, electronic and mechanical systems
- Enjoy solving practical problems
- Good hand-eye coordination
- Good eyesight (may be corrected) and normal colour vision
- Good communication skills
- Enjoy customer service
- Enjoy working with computers
- Attention to detail

Education and Training

To become a business equipment technician you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Business equipment technicians work for business machine and equipment manufacturing, sales, hire or service firms. They may also work for independent providers of machine maintenance service. Depending on the employing company, business equipment technicians may also enter into electronics work or other mechanical servicing occupations. They may also move to the sales side of a business machine company. Promotion to service management and training is possible, and technicians may transfer to computer servicing.

Related Jobs

Electrician (p 291).

Cabinetmaker

Also known as Furniture Maker

Cabinetmakers make, repair or install furniture (both free-standing and fixed) using solid timber, flat-panel or timber-based products and a wide range of laminates and other materials.

Cabinetmakers:

- communicate with clients to determine specific job requirements
- match furnishing styles and materials to clients' needs
- deliver and monitor service to clients
- estimate job costs
- measure and draw site layouts for manufactured furniture
- read and interpret work documents in order to prepare accurate cutting lists for jobs
- program and control computer-aided design (CAD) and computer numerical control (CNC) machines
- understand and select timber and timber products for furniture production
- fabricate custom furniture
- prepare and assemble cabinets for installation
- select and install hardware to furnishings, such as handles and hinges
- perform on-site repairs and adjustments of cabinets
- clean and maintain work areas, including machinery and tools, to ensure a safe working environment.

Personal Requirements

- Enjoy practical and manual activities
- Able to follow written instructions
- Able to work to a high level of accuracy
- Able to make mathematical calculations
- Good communication skills
- Good hand-eye coordination
- Able to work independently or as part of a team
- Free from allergies to dust

Education and Training

To become a cabinetmaker you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Most cabinetmakers are employed by firms that manufacture kitchens, bathrooms, furniture and prefabricated wooden components. These firms are often small businesses that make custom-made items or undertake repairs and restoration, or larger companies that manufacture and install fixed or free-standing furniture for commercial and residential projects. Depending on personal qualities and knowledge of the trade, opportunities are available for promotion to the position of

supervisor or manager. With experience, start-up funds and business training, competent cabinetmakers may also establish their own business.

Related Jobs

Glass and Glazing Tradesperson (p 298).

Cable Jointer

Also known as Telecommunications Line and Cable Worker

Cable jointers make and repair joins in insulated power supply and control cables installed in underground pipes, trenches and overhead systems. They also prepare cable terminations for electrical equipment and overhead lines. Cable jointers also install and maintain underground electrical cables used to transmit and distribute electricity in city and country areas, new housing estates and industrial centres.

Cable jointers:

- pull electrical cables through underground pipes or conduits and join cables in transmission and distribution systems
- prepare low- and high-voltage cable joints and cable terminations while connecting and installing electrical equipment and overhead lines
- test and locate cable faults, and maintain and repair cables.
- update location diagrams for the layout of cable systems
- ensure that conductors are correctly connected between substations and customers' premises when installing and making repairs
- assist with manufacturing and preparing cable jointing components
- dig trenches and service pits or tunnels
- encase cables in protective covers
- work with other staff to install or replace cables.

Cable jointers mainly work outdoors, sometimes in cramped and confined conditions or at heights. They often work in sub-stations, which reduce high-voltage electricity to lower levels for consumer use. They need to maintain good relations with property owners, tenants and authorities. Cable jointers often work as part of a team.

Personal Requirements

- Enjoy practical work
- Able to cope with the physical demands of the job
- Normal eyesight and colour vision
- Good hand-eye coordination
- Safety-conscious
- Able to work at heights
- Good communication skills.

Education and Training

To become a cable jointer you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Cable jointers employed by a network operator must fulfill employer qualification requirements and do not require an individual electrical licence.

Employment Opportunities

Most cable jointers work on underground electricity distribution and service cables for electricity corporations or private subcontractors. Work is carried out in cities, suburbs, large industrial centres and country towns. Cable jointers may be responsible for work in a particular area or district. Occasionally, cable jointers working for electricity authorities are required to work away from home for periods of time.

Related Jobs

Data and Telecommunications Cable Worker (p 287); Electrical Engineer (p 139); Electrical Linesperson (p 290); Electrician (p 291); Telecommunications Technician (p 324).

Car Driver

Car drivers transport passengers to their destinations.

Car drivers:

- pick up passengers at designated locations or when hailed and transport them to their desired destinations
- use mobile computer systems and radio networks to access waiting passenger information
- check passenger destinations and determine the most appropriate route
- receive money or credit payments for fares and give required change
- assist passengers with the handling of luggage
- keep accurate records of driver shifts, income and expenses
- arrange regular repairs, general maintenance and cleaning of vehicles.

Specialisations

- Taxi Driver

Personal Requirements

- High-level driving skills
- Able to meet age restrictions
- Able to work long or irregular hours
- Good communication skills
- Able to remain calm in difficult situations
- Neat personal appearance

Education and Training

You can work as a car driver without formal qualifications, but you will need to obtain a specific licence. To become a taxi driver, you will need to complete an approved training course. Depending on your state or territory, you may also need to pass a written examination. Contact the transport department in your state or territory for more information.

Additional Information

To apply for accreditation, you must meet the requirements in your state or territory. This may include a National Police Certificate, a medical assessment and an English language competency test. To become eligible to drive a wheelchair accessible taxi, drivers may need to undertake further training in the use of special equipment and the particular needs of people in wheelchairs.

Employment Opportunities

Taxi drivers work for taxi companies or for themselves. Most taxi owners drive their own taxis and have drivers who work the other available shifts. Taxi drivers usually pay the taxi owner a rental, which can be a flat rate or a percentage of the fares received. Taxi drivers must have an Australian Business Number (ABN) and be registered for GST. As a taxi driver you can select your own hours or work part time to suit your lifestyle. However, the demand for taxi services varies at different times of the day and throughout the year. Chauffeurs/public hire vehicle drivers work for government departments, hotels and private hire car companies. Self-employed chauffeurs/public hire vehicle drivers are often subcontracted to private companies.

Related Jobs

Bus Driver (p 279); Delivery Driver (p 288); Driving Instructor (p 289); Furniture Removalist (p 297); Truck Driver (p 329).

Car Wash Attendant

Car wash attendants wash, scrub and polish the exteriors of vehicles. They may also vacuum seats and carpets and clean door trims and hinges in the interior of vehicles.

Car wash attendants:

- vacuum, clean and maintain vehicle interiors, including dashboards, consoles, carpet and car seats
- clean door trims and hinges
- wash and polish vehicle exteriors and blacken tyres
- drive vehicles through automatic car washes.

Specialisations

- Vehicle Detailer

Personal Requirements

- Enjoy practical work
- An eye for detail
- Able to work without supervision
- Able to cope with the physical demands of the job

Education and Training

You can work as a car wash attendant without formal qualifications. You will probably get some informal training on the job. You can also become a car wash attendant through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

You are usually required to have a drivers licence to be a car wash attendant.

Employment Opportunities

Car wash attendants are employed in car dealerships (new and used), service stations, collision repair businesses, vehicle rental firms, bus and truck depots, and car wash and detailing businesses. Opportunities are also available for self-employment.

Related Jobs

Cleaner (p 259).

Carpenter

Carpenters construct, erect, install, finish and repair wooden and metal structures and fixtures on residential and commercial buildings. They may also carry out work on large concrete, steel and timber structures such as bridges, dams, power stations and civil engineering projects.

Carpenters:

- construct formwork into which concrete is poured
- set out an outline of the building on the ground of the site, using string and pegs to allow for excavations
- build floors, wall frameworks (timber or metal) and roofs, and lay timber floors
- read plans and specifications to determine the dimensions, materials required and installation processes to be followed
- install metal and timber windows, sashes and doors
- construct and erect prefabricated units, such as cottages and houses
- cut materials with hand and power tools, and assemble, nail, cut or shape parts
- install door handles, locks, hardware, flooring underlay, insulating material and other fixtures
- maintain and sharpen tools.

Personal Requirements

- Enjoy practical work
- Able to cope with the physical demands of the job
- Able to work with your hands
- Good sense of balance and ability to work at heights
- Good at mathematics
- Good health and eyesight
- Able to work as part of a team

Education and Training

To become a carpenter you usually have to complete an apprenticeship in Carpentry. Entry requirements may vary, but employers generally require Year 10.

Additional Information

In some states and territories, carpenters must either be accredited as, or work under the supervision of, a registered building practitioner. Workers in the construction industry must undergo safety induction training and be issued with a Construction Induction Card (CIC).

Employment Opportunities

Carpenters may work as subcontractors or may be employed by building and construction companies. Most carpenters are employed on housing projects, construction and civil engineering projects, and in maintenance roles in large factories, hospitals, institutions and private homes. Many carpenters specialise in areas such as framing, fixing or formwork.

Related Jobs

Army Trades (p 153); Builder (p 278); Cabinetmaker (p 280); Construction Worker (p 286); Glass and Glazing Tradesperson (p 298); Plumber (p 311); Roofer (p 317).

Cashier

Also known as Checkout Operator and Point-Of-Sale operator

Cashiers receive cash, cheques or credit/debit card payments, record these payments using cash registers or electronic equipment and provide change to customers.

Cashiers:

- receive goods selected by the customer and operate cash registers
- talk with other staff where there is doubt about a particular price
- receive payment for goods from customers and provide change as shown by the electronic cash register
- weigh, wrap or pack goods and remove price tags and special security tabs
- help customers find products in the store
- price items with a price gun and rotate stock by bringing the old stock forward on the shelves during quieter times
- process payment for accounts such as telephone or electricity bills and issue receipts
- work out totals for cash and other takings at the end of each working day
- count and prepare money for deposit in a bank or building society
- keep records of amounts received and paid, and regularly check the cash balance against this record
- operate automatic ticket-issuing machines and other computerised equipment.

Shiftwork and irregular hours may be involved. Most cashiers are employed on a part-time or casual basis. In most workplaces you will need to use computer systems for sales or payment processing.

Specialisations

- Office Cashier
- Service Station Cashier

Personal Requirements

- Enjoy clerical and administrative tasks
- Able to work quickly and accurately
- Confidence in handling money
- Good communication skills
- Good customer service skills

Education and Training

You can work as a cashier without formal qualifications. You will probably get some informal training on the job. You can also become a cashier through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Cashiers work in department stores, supermarkets, variety stores and related establishments in city and country locations. With experience, cashiers may move into clerical, accounts or sales areas, or into supervisory roles.

Related Jobs

Bank Officer (p 53); Postal Employee (p 161); Sales Assistant (p 269).

Chemical Plant Operator

Also known as Petroleum and Gas Process Operator and Process Technician

Chemical plant operators control the operation of chemical production equipment used in processing minerals and in manufacturing a range of products such as drugs, textiles, ammunition and plastics.

Chemical plant operators:

- prepare and measure raw materials
- feed raw materials and processing agents into plant machinery
- set controls and operate machinery
- check instruments and equipment to ensure correct operation, and attend to any abnormal operating conditions
- take samples for testing, test products and record process data.

Chemical plant operators may work in production areas that are noisy, hot, dusty and, at times, contain fumes. However, the work environments are generally spacious, ventilated and well lit. The majority of the work may be completed while standing. Shiftwork is sometimes required. Plant operators usually work in teams and must adhere to safety regulations due to the nature of the work. Protective equipment is supplied.

Specialisations

- Chemical and Hydrocarbon Plant Technician

Personal Requirements

- Enjoy practical and manual activities
- Able to work as part of a team
- Able to follow written instructions
- Good communication and numeracy skills
- Able to cope with the physical demands of the job
- Mechanical aptitude
- Good problem-solving and analytical skills
- Aptitude for working with computers
- Good hand-eye coordination

Education and Training

You can work as a chemical plant operator without formal qualifications. You will probably get some informal training on the job. You can also become a chemical plant operator through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Chemical plant operators are employed in industries that produce pharmaceuticals, petrochemicals, plastics, paint, explosives, industrial gases, fertilisers and cosmetics, as well as in industries that process minerals and treat waste materials. In the minerals industry they are employed in onshore and offshore oil and gas wells or rigs, in refineries and in oil storage facilities (terminals). Employment opportunities depend on the profitability of these sectors, the price and quantity of similar chemicals imported from overseas, advancements in technology and government controls restricting the nature of by-products.

Related Jobs

Chemical Engineer (p 137); Laboratory Worker (p 240); Machine Operator (Non-metal Products) (p 305); Process Plant Operator (Oil and Gas) (p 313); Rubber Processor (p 318).

Civil Celebrant

$1,163

Lower skill

Very strong

Also known as Celebrant , Community Celebrant , Family Celebrant , Funeral Celebrant and Marriage Celebrant

Civil celebrants design, plan and perform civil (non-religious) marriage ceremonies, funerals, commitment ceremonies, namings and other ceremonies, in consultation with individuals, couples and families.

Civil celebrants:

- work with individuals, couples, families or other groups to create a ceremony meeting their requirements
- design and organise personalised ceremonies and deliver these ceremonies to a wide range of audiences in a variety of settings
- perform marriages and ensure legal paperwork is correct and submitted on time
- communicate with people dealing with significant life changes, including loss and grief
- use computer and internet systems for research, marketing, communication and support via professional organisations and the Attorney-General's Department.

Funerals, memorials and other loss ceremonies can be emotionally demanding for both celebrants and their clients.

Personal Requirements

- Enjoy working with a variety of different people
- Good oral and written communication skills
- Confident in public-speaking situations
- Creative, flexible, tactful and empathetic
- Mature, ethical, responsible, dedicated and conscientious
- Socially and psychologically insightful
- Good organisation skills

Education and Training

You can work as a civil celebrant without formal qualifications. Entry to this occupation may be improved if you have qualifications. In order to perform weddings you will need to complete a VET qualification and meet the requirements for registration with the Attorney-General's Department.

Additional Information

To become a registered marriage celebrant with the Attorney-General's Department, you must be at least 18 years of age and meet the Fit and Proper Person Requirements set for appointment. You will also need to undertake regular professional development. Marriage celebrants have a complex set of responsibilities under the law, and failure to meet these is a criminal offence in some cases. There are separate registration criteria for marriage celebrants who are fluent in an Australian Indigenous language. For more information, refer to the Marriage Celebrants Section of the Attorney-General's Department.

Employment Opportunities

Civil celebrants usually perform only a small number of weddings and other ceremonies each year. Most civil celebrants work casually or part-time.

Civil Construction Worker

$1,192

Entry level

Stable

Also known as Road Infrastructure Worker and Road Worker

Civil construction workers compact, level and spread materials to form roads and footpaths, perform minor repairs to damaged surfaces, maintain bridges, and repair signs and guideposts. They also undertake general roadside maintenance such as grass cutting, weed control and litter collection.

Civil construction workers:

- clear scrub, strip grass and remove topsoil
- assist with preparation for laying drains
- spread gravel to form the road base
- operate tank-truck distributors or hoses to spray tar, road oils and emulsions on the road before surfacing
- operate paving machines or spread stone chips, gravel or asphalt onto road surfaces
- erect and dismantle barricades and construction signs
- direct traffic through the construction area
- load and unload equipment and clean the worksite
- calculate the quantities for ordering materials
- comply with environmental and safety orders
- landscape surrounding areas with trees and grass seed.

Civil construction workers may work as members of a small roadwork team.

Civil construction workers may work in the following categories:

- Road construction: mix and lay compacting gravel, and operate paving machines to spread stone chips, gravel or asphalt on road surfaces to construct sealed roads.
- Road maintenance: repair and replace roadside furniture, patch potholes, as well as maintain drains and sealed roads.
- Bridge and construction maintenance: the installation, construction and maintenance of concrete bridges.
- Pipe laying: the installation of pipe lines for water, sewerage or storm water.

Personal Requirements

- Enjoy practical and outdoor work
- Able to cope with the physical demands of the job
- Good hand-eye coordination
- Able to work as part of a team

Education and Training

To become a civil construction worker you usually have to complete a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

All those who work in the construction industry must undergo safety induction training and be issued with a Construction Induction Card (CIC).

Employment Opportunities

Civil construction workers are employed by civil contractors (infrastructure contractors), government roadwork authorities and local councils. With experience, and sometimes further training, it is possible to progress to more specialised tasks or supervisory positions.

Related Jobs

Concreter (p 285); Construction Worker (p 286); Mobile Plant Operator (p 307).

Clothing Patternmaker

$1,132 Medium skill Decline

Clothing patternmakers produce master patterns from designs. They work closely with designers, interpreting their sketches to develop a style that can be achieved by the company's equipment and staff, and that fits the image of the company's label.

Clothing patternmakers:

- interpret a design sketch
- choose the correct 'block' (a pattern shape that forms the basic characteristics of a garment)
- make adjustments to the pattern to arrive at a sample pattern, which is then used to decide whether to produce the garment in bulk
- check the accuracy of the sample pattern
- work with the sample machinist at various stages throughout the process, such as cutting out the sample garment and determining the amount of fabric used
- advise on the correct machining technique to use
- check that the sample garment maintains the look of the original design
- check the fit of the sample on a mannequin, or on a model employed by the firm
- modify sample garments to meet cost specifications and manufacturing limitationsonce it is approved for production, reproduce the sample pattern on a pattern board to make a master patterncreate the required range of sizes by 'grading' the pattern, usually using a computer-aided design (CAD) system.

In some cases, patternmakers may be employed in additional job roles, such as designer, sample machinist, grader or marker maker.

Personal Requirements

- Enjoy practical and manual activities
- Good hand-eye coordination
- Artistic flair, with an eye for detail
- Good sense of proportion
- Aptitude for technical activities
- Able to work neatly and accurately.

Education and Training

To become a clothing patternmaker, you usually have to complete a VET qualification in clothing production or applied fashion design and technology. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information. You may be able to study through distance education.

You can also become a clothing patternmaker through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

With the increasing use of CAD techniques, computer skills will greatly improve your employment prospects in this field.

Employment Opportunities

Clothing patternmakers are employed by clothing manufacturers in small or large businesses. They are usually multi-skilled and are likely to be involved not only in patternmaking, but also in design and cutting for garment production. Patternmakers can establish their own businesses as dressmakers or tailors.

Concreter

$2,100 Entry level Strong

Concreters place, spread, compact, finish and cure concrete for buildings, roads, tunnels, bridges and marine structures, using hand tools and automated machinery.

Concreters may:

- mix cement, gravel, sand and water to make concrete on site
- move concrete into position using a concrete pump
- place concrete into the formwork (usually temporary wood or steel moulds), ensuring it is spread and levelled, then compacted
- operate paving and trowelling machines to float, trowel and polish the concrete surface
- create different surface textures by tamping, smoothing and shaping the concrete surface with a variety of hand tools
- cut joints into hardened concrete
- mix and apply pigments when a coloured surface is required
- dig foundation trenches if working on residential or small commercial projects.

For most jobs, concrete is mixed at a pre-mix concrete supplier's factory and delivered to the site in a pre-mix concrete truck. Concreters usually work outside on construction sites that may be dusty and noisy. Much of their time is spent standing or kneeling and they may also have to work at heights or underground in tunnels. They may travel from job to job and usually begin work very early in the morning. There is a growing industry in precast concrete where concrete elements are cast and cured in factories then transported to the site for use.

Personal Requirements

- Able to cope with the physical demands of the job
- Able to lift heavy objects
- Enjoy practical and outdoor work

Education and Training

You can work as a concreter without formal qualifications. You will probably get some informal training on the job. You can also become a concreter through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

You may need to be accredited as, or work under the supervision of, a registered building practitioner if carrying out work above a certain value. Workers in the construction industry must undergo safety induction training and be issued with a Construction Induction Card (CIC). Training is conducted by Registered Training Organisations.

Employment Opportunities

Most concreters are employed on building and construction sites by building and construction companies, or by subcontractors or Group Training Organisations. A small amount of work is generated by other uses of concrete, such as kerbing, driveways, paths and retaining walls. With experience or further training, labourers may progress to skilled positions. Due to changing conditions within the construction industry, including differences in the demand and supply of various construction materials and the use of new technologies, the availability of work may vary.

Construction Worker

Also known as Builder's Labourer and Concrete Worker

Construction workers assist on building and construction sites by doing a range of manual labouring jobs. Construction workers may specialise by working with particular tradespeople as a trade assistant, such as a plasterer's or bricklayer's labourer, or a carpenter's assistant. Experienced construction workers may obtain high-risk work licences or 'tickets' to undertake a number of specialised roles, such as concrete workers, doggers, riggers, scaffolders or steel fixers.

Construction workers:

- unload, carry and stack building materials and place tools and equipment in position
- dig trenches using hand tools or jackhammers to break up rock and concrete, so that footings and services can be laid
- place and compact filling and quarry materials
- help to erect and dismantle scaffolding (subject to certification in some states and territories), ramps, catwalks, barricades and warning lights
- mix, pour and spread concrete under supervision
- use wheelbarrows to remove rubble and rubbish from building sites
- dismantle small structures and strip materials in preparation for new construction
- operate construction machinery (such as excavators), subject to any licensing and accreditation requirements
- clean surfaces for painters.

Construction workers mostly work outdoors.

Construction workers may specialise by working with particular tradespeople as a trade assistant, such as a plasterer's or bricklayer's labourer, or a carpenter's assistant. Experienced construction workers may obtain high-risk work licences or 'tickets' to undertake a number of specialised roles, such as concrete workers, doggers, riggers, scaffolders or steel fixers. see the separate entries for these occupations for further information.

Personal Requirements

- Able to cope with the physical demands of the job
- Enjoy practical and outdoor work
- Able to work as part of a team
- Able to work at a constant pace
- Able to read and understand safety instructions
- Able to follow precise directions

Education and Training

You can work as a construction worker without formal qualifications. You will probably get some informal training on the job. You can also become a construction worker through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

When working at heights, industry standards require construction workers to complete a Work Safely at Heights short course provided by a Registered Training Organisation. All those who work in the construction industry must undergo safety induction training and be issued with a Construction Induction Card (CIC).

Employment Opportunities

Construction workers work for large construction firms and smaller building subcontractors. Many gain employment through labour hire companies. They work on the construction of a range of buildings, including residential houses, apartment complexes, shopping centres, offices, hotels, factories, tourist resorts, public buildings, hospitals and schools. Construction workers also work on heavy industrial or civil construction sites; road, tunnel and shaft excavations; demolition sites; and local government works. On completion of a job, construction workers may have to apply to new sites for their next job. If they work for a civil, building or trade subcontractor (bricklayer, for example), new worksites may be organised for them. Employment opportunities can vary greatly in line with trends in the civil or building and construction industries.

Related Jobs

Carpenter (p 282); Concreter (p 285); Roofer (p 317); Tiler - Wall and Floor (p 325).

Conveyancer

Conveyancers prepare the documentation required for the purchase and sale of real estate and attend to property settlements. Conveyancers must have a sound knowledge of land law, land division, surveying, property development, property management, strata administration, insurance, taxation, business analysis, investment and contracts.

Conveyancers:

- prepare and advise on contracts for the sale of real estate
- conduct title searches and make enquiries with various government departments, local councils and water authorities
- prepare and advise on mortgage documentation
- attend to contract exchange and settlement procedures
- prepare and advise on lease documentation.

Conveyancers may communicate with clients, real estate agents, banks, building societies and finance companies, as well as government departments and rating authorities.

Personal Requirements

- Good communication skills
- Good organisational skills
- Integrity and sound judgment

Education and Training

To become a conveyancer you usually have to complete an accredited course in conveyancing and undertake two years of practical experience. To get into these courses you usually need to gain your Senior Secondary Certificate of Education with English. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Additional Information

To work as a conveyancer you must be licensed by the relevant body in your state or territory. Contact the Australian Institute of Conveyancers for more information.

Employment Opportunities

Conveyancers are generally self-employed or work in conveyancing businesses, law firms, financial institutions, banks, building societies and some government departments. Conveyancers employed by financial institutions generally specialise in finance and must have experience with land transactions. Those who are self-employed may also need to maintain accurate records related to running an office, such as accounts.

Related Jobs

Accountant (p 50); Insurance Officer (p 61); Lawyer (p 196); Real Estate Salesperson (p 63); Valuer (p 66).

Crane Operator

Also known as Crane Driver

Crane operators control mobile or stationary cranes to lift, move and place objects at locations such as building and construction sites, wharves and shipyards.

Crane operators:

- check the condition of the ground before setting up the crane (on a building site, for example)
- place timber blocks or steel plates under the outrigger pads of the crane
- check that the crane is level on the outriggers before attempting to lift and place a load
- be aware of how much material can be safely hoisted in each load according to the crane's capacity and the weather conditions (high winds, for example)
- ensure that cranes are ready for use by checking controls, instruments and gauges
- move the crane and position the hook so that doggers can attach loads, slings, shackles and chains
- check crane cabin instruments to ensure that loads hooked on their machines are within safe working limits
- observe and follow the signals given by doggers who direct the moving and positioning of the loads
- maintain cranes by inspecting them for defects or wear, lubricate ropes and winches, and replace worn cables.

Crane operators work on building and construction sites, in all weather conditions. They may operate a variety of cranes: overhead and gantry cranes used in factories and workshops, portal cranes used to move shipping containers, tower cranes used on large building projects, and mobile cranes that may be truck mounted.

Personal Requirements

- Enjoy technical and engineering activities
- Able to concentrate for long periods
- Able to follow verbal and visual instructions
- Mechanical aptitude and good coordination
- Good eyesight for visual judgment of distances
- Comfortable working at heights
- Safety-conscious
- Able to work as part of a team
- At least 18 years of age

Education and Training

To become a crane operator you usually have to obtain a licence to Perform High Risk Work. To gain a licence, you will need to register with an approved Registered Training Organisation and work under the supervision of a licensed operator. You will also need to keep an approved logbook to record competencies achieved during training. Assessment by an independent assessor will then be required. The Perform High Risk Work Licence is issued under the National Standard for Licensing Persons Performing High Risk Work. You can also become a crane operator through a traineeship in Building and Construction (Specialist Trades), Construction Crane Operations or Mobile Crane Operations. Entry requirements may vary, but employers generally require Year 10. For more details, see Section 2. Ask your career adviser about the possibility of starting some of this training in school.

Additional Information

Licences to Perform High Risk Work are issued according to specific classes of crane operation. It is preferable to have a dogging licence before undertaking training to become a crane operator. All those who work in the construction industry must undergo safety induction training and be issued with a Construction Induction Card (CIC).

Employment Opportunities

Crane operators are employed by building, civil contracting and construction companies; steel companies; crane contractors; manufacturing and engineering firms; iron and steel foundries; timber yards; and the minerals industry. They work on building sites, in factories and on wharves. Employment opportunities largely depend upon the level of activity within the construction industry, which in turn depends upon the conditions of growth in the economy and the level of private and government investment in construction projects.

Related Jobs

Construction Worker (p 286); Forklift Operator (p 296); Furniture Removalist (p 297); Mobile Plant Operator (p 307); Rigger (p 316); Waterside Worker (p 332).

Data and Telecommunications Cable Worker

Data and telecommunications cable workers are involved in the installation and maintenance of data and telecommunications cables, which may be located in underground pipes, trenches or overhead systems. They usually work with either copper or fibre optic cables and specialise in a particular procedure or area of expertise.

Data and telecommunications cable workers:

- install, join or splice metallic and fibre-optic cables
- perform relevant cable tests to ensure joints and fibre splices comply with site and manufacturer specifications and relevant legislation
- install underground and aerial lead-in cables
- install above-ground equipment enclosures
- fix cable faults
- perform fault clearance
- tag cables for future identification.

Data and telecommunications cable workers may work indoors and outdoors, sometimes in cramped conditions or at heights. They often work as part of a team. Some telecommunications cable workers are involved in installing equipment on customer premises and need to maintain good relations with property owners, tenants and authorities.

Personal Requirements

- Enjoy practical work
- Normal eyesight and colour vision
- Able to cope with the physical demands of the job
- Good hand-eye coordination
- Safety-conscious
- Able to work at heights and in confined spaces
- Good communication skills

Education and Training

To become a data and telecommunications cable worker you usually have to complete a traineeship. Entry requirements may vary, but employers generally require Year 10. You can also become a data and telecommunications cable worker by completing a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Additional Information

In order to undertake data and telecommunications cabling work, you need to be registered with an Australian Communications and Media Authority-accredited registrar. see www.acma.gov.au for more details.

Employment Opportunities

Data and telecommunications cable workers are employed by a variety of small, medium and large enterprises. These include large telecommunications carriers and their contractors, network and exchange equipment suppliers, customer premises equipment suppliers and installation or maintenance service providers. The data and telecommunications industry is subject to continuing and rapid technological change. One of the major Australian Government initiatives for the telecommunications industry is the National Broadband Network (NBN). This is the largest infrastructure project ever to be undertaken in the country, and aims to deliver high-speed broadband to all Australians. With the rollout due to be completed in 2020, data and telecommunications cable workers are increasingly involved in this area. For more information, visit www.nbnco.com.au/workforce.

Related Jobs

Electrical Linesperson (p 290); Telecommunications Engineer (p 148).

Delivery Driver

Also known as Courier

Delivery drivers use light vans, cars, utilities, motorcycles, scooters or bicycles to pick up and deliver goods, usually over short distances.

Delivery drivers:

- drive the vehicle into position for loading or unloading
- assist with loading or unloading to ensure goods are correctly stowed
- check loading documents
- plan the shortest delivery route and drive the vehicle to the destination
- use a two-way radio, or other electronic device, to keep in contact with the depot or base
- complete paperwork and use a handheld scanning device
- arrange unloading and obtain a receipt for goods delivered
- handle cash and give correct change to customers
- provide customer service and advice
- report vehicle maintenance needs
- hand-deliver goods.

Some delivery drivers are employed on a subcontract basis and provide their own vehicles. Motorcycle and bicycle couriers nearly always provide their own transport. Some delivery drivers wear a uniform.

Personal Requirements

- Trustworthy and reliable
- Able to gain a thorough knowledge of city and suburban streets
- Good communication skills and some mathematical ability
- Able to cope with the physical demands of the job
- Safe driving skills

Education and Training

You can work as a delivery driver without formal qualifications. You will probably get some informal training on the job. You can also become a delivery driver through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

You will need an appropriate drivers licence for motorised vehicles.

Employment Opportunities

There is an increasing number of opportunities for bicycle couriers in metropolitan areas, as they are very efficient in busy city conditions.

Related Jobs

Car Driver (p 281); Furniture Removalist (p 297); Transport Clerk (p 329); Truck Driver (p 329).

Digital Printer

Also known as Printer

Digital printers use machines and software to control the production of print-based media for commercial print manufacturing sites and instant print shops.

Digital printers:

- perform manual and automatic set up of digital print machines
- advise on products and services
- receive and process electronic documents
- develop basic design concepts
- load paper into feeding mechanisms
- manage and monitor the order and execution of files in a printer's job queue
- operate die-cutting machines
- undertake vinyl application, laminating, finishing and mounting
- perform general administration duties and maintenance (such as maintaining order and query logs, cleaning and repairing equipment, and changing supplies)
- keep production records.

Personal Requirements

- Enjoy technical activities
- Good eyesight (may be corrected) and normal colour vision
- Good hand-eye coordination
- Able to carry out detailed work
- Aptitude for mechanical work
- Aptitude for working with computers
- Able to work as part of a team

Education and Training

You can work as a digital printer without formal qualifications. You will probably get some informal training on the job. You can also become a digital printer through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Digital printers are employed by large and small commercial printing firms and shops. Technological development has been rapid in the printing industry with the widespread application of computerised systems. Demand is greatest for people familiar with the new techniques and technology.

Driller's Assistant

Also known as Driller's Offsider

Drillers' assistants help move, set up and operate drilling rigs and related equipment to drill holes for such things as oil, natural gas and water, building foundations, minerals exploration and site investigation.

Drillers' assistants:

- help move drilling rigs and equipment from site to site, set up in the new site and connect power cables or hoses for water and air supply
- help obtain high-quality drilling core samples
- assist drillers with all drilling processes
- mix and test drilling fluids, chemicals and grout
- assist with slotting, welding and inserting casing screens
- assist with well development and pumping tests
- operate equipment such as pumps for air, water and mud
- carry out routine maintenance and repairs
- clean and maintain equipment, as well as drill and camp sites.

Drillers and drillers' assistants usually work long hours on roster systems, either outdoors or underground, as members of teams or crews. The work is often manual and physically demanding. Compliance with all safety systems is essential.

The major sectors in the drilling industry are:

- Blasthole drilling to place explosives for the removal of rock and ore in quarries and mines, as well as the construction of roadworks, dam sites and other capital works.
- Mineral exploration and investigation drilling for suspected or known mineral deposits (this is carried out both in Australia and by Australian companies overseas).
- Oil and gas drilling (this is carried out offshore and onshore by contract companies that are mainly employed by oil companies).
- Site investigation/geotechnical drilling to determine the characteristics of soil and rock on construction sites.
- Foundation/construction drilling on construction sites, usually in towns and cities, as a part of the building or construction process.
- Water well drilling for stock and domestic or commercial bores (this is mainly carried out by private contractors based in rural areas).

Personal Requirements

- reliable and adaptable
- good organisational skills
- enjoy working as part of a team
- able to cope with the physical demands of the job
- enjoy practical and manual activities
- aptitude for mechanics and machinery
- willing to work in remote areas under difficult conditions.

Education and Training

You can work as a driller's assistant without formal qualifications. You will probably get some informal training on the job. You can also become a driller's assistant through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

All those who work in the construction industry must undergo safety induction training and be issued with a Construction Induction Card (CIC). To work as a driller's assistant, you must be at least 18 years of age, undergo a National Police Check and pass a pre-employment medical examination and drug and alcohol clearance. Many worksites will also require you to have a heavy vehicle drivers licence and a Provide First Aid Certificate.

Employment Opportunities

Drillers' assistants are employed by drilling contractors, mining companies, oil companies, consultants and farmers. They work at construction sites, mines, and oil and gas exploration and production facilities situated offshore and onshore.

Demand for drillers' assistants varies greatly with commodity prices, general economic conditions and government policies in relation to mining, groundwater regulations and infrastructure projects.

Crossover from one sector of the drilling industry to another often occurs when a sector is quiet. Many drilling contractors operate in several sectors.

Opportunities exist for those with sound practical experience to move into management or supervisory roles.

Driving Instructor

Also known as Driver Trainer

Driving instructors teach individuals and groups the theory and practical application of driving skills.

Driving instructors:

- instruct students to drive a motor vehicle by teaching them how to steer, change gears (if manual), interpret and understand traffic conditions, reverse, park, and understand mechanical components and functions
- teach road traffic regulations and advise students when they are ready for assessment
- teach road craft and defensive driving skills
- advise on and teach advanced driving techniques for emergency situations and/or to extend driving knowledge.

Many driving instructors work on a commission basis. Some use their own vehicles, which are converted to dual control (with pedals on the front passenger side), while others use company vehicles. The work can be stressful, with long and irregular hours. Driving instructors have a high level of public contact. Driving instructors with special licences teach people to drive buses and rigid or articulated vehicles.

Personal Requirements

- Enjoy working with people
- Sound character
- Good interpersonal skills
- Able to give clear and precise instructions

- Patient and tactful
- Good eyesight (may be corrected)
- Able to act quickly and correctly in various traffic situations

Education and Training

To become a driving instructor you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Additional Information

Depending on your state or territory, you will need to meet requirements such as minimum age, drivers licence specifications and pre-employment checks. This may include a National Police Check, Working with Children Check and medical clearance.

Employment Opportunities

Driving instructors are usually employed on a subcontract basis, being paid commission for each lesson given. Demand is seasonal, increasing during school summer holidays. They may work full time where demand allows. A large number are self-employed. Where only part-time employment is available, they may work outside the industry to supplement their earnings. Your employment prospects may be improved if you can speak and read a second language.

Related Jobs

Bus Driver (p 279); Car Driver (p 281); Delivery Driver (p 288); Truck Driver (p 329).

Dry Cleaner

Dry cleaners care for, clean, repair and rejuvenate clothing, curtains, bedding and furnishings by operating dry cleaning and ironing machines.

Dry cleaners:

- comply with occupational health and safety and environmental regulations
- sort and examine articles, picking out those that may need hand spotting or stain treatment
- sort articles into lots of equal weight, colour and type and load into computer-operated dry cleaning machines
- use and store dry cleaning chemicals and solvents
- unload the machines when the cleaning cycle is completed
- iron and press clean articles, or send them to the finishing section where the garments are pressed by steam and vacuum
- operate a boiler
- replace missing buttons and make minor repairs
- waterproof garments and apply other finishes
- operate wet cleaning machines
- check and inspect garments to ensure customer requirements have been met
- perform basic maintenance on dry cleaning and pressing equipment
- put together orders and dispatch goods.

Dry cleaners need to have a thorough knowledge of how fabrics and their blends react to the various stages of the dry cleaning process. They must apply specialised treatment to fabrics and materials such as wool, silk, leather and vinyl, and to beading and other decorative finishes. Work environments can be hot and humid, but most workplaces are well ventilated and have exhaust fans or evaporative coolers. Dry cleaners are required to stand for long periods. Customer contact may also be necessary.

Personal Requirements

- Enjoy practical work
- Normal colour vision
- Able to cope with the physical demands of the job

Education and Training

You can work as a dry cleaner without formal qualifications. You will probably get some informal training on the job. You can also become a dry cleaner through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Most dry cleaners work in small plants located in shopping centres. Large plants employing many people are typically in areas close to the city and are serviced by vans bringing articles for cleaning from various agencies and shops. There are also opportunities for self-employment. With experience, and sometimes further training, it is possible to progress to supervisory and management positions.

Related Jobs

Cleaner (p 259).

Electrical Linesperson

Also known as Electrical Powerline Tradesperson and Lineworker

Electrical linespersons install, repair and maintain overhead lines and cables carrying electricity to domestic, commercial and industrial users and electric train services.

Electrical linespeople:

- patrol electrical lines and inspect poles and towers
- install earth stakes, power poles, towers and guy wires using power tools and other equipment
- install and maintain aerial equipment such as conductors, cross arms, insulators, street lights, customer supply points, transformers, pole-mounted circuit breakers and switches
- trim tree branches clear of power lines using machinery
- cover live wire with insulating materials
- adjust the tension of cables and join overhead conductors using compression and wrap-on fittings
- perform emergency repairs such as isolating live wires
- ensure that conductors are correctly connected between the mains and customers' premises when performing installations or repairs
- monitor safe working conditions, and practise resuscitation, rescue and first aid procedures.

As electrical linespeople work with high and low voltages at considerable heights, they are given extensive training in safety procedures. They may be called out during emergencies at any time of the day or night and in all weather conditions.

Personal Requirements

- Enjoy outdoor work
- Enjoy practical work
- Willing and able to work at heights
- Safety-conscious
- Normal colour vision

- Good with hands
- Able to work well as part of a team

Education and Training

To become an electrical linesperson you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10, and many prefer Year 12.

Additional Information

After completing your apprenticeship, you will need to apply for a licence to perform electrical work from the relevant government department or authority in your state or territory.

Employment Opportunities

Most electrical linespeople are employed by major electricity suppliers and contracting companies working within the electricity supply industry. There are also opportunities for employment with local government authorities that have their own electricity supplies and with public transport authorities.

Work is available in capital cities and large industrial centres. In country towns, there is usually a resident electrical linesperson. Electrical linespeople working for the railways or electricity authorities may be required to work away from home.

Related Jobs

Data and Telecommunications Cable Worker (p 287); Electrician (p 291); Telecommunications Technician (p 324).

Electrician

Electricians install, maintain, repair, test and commission electrical and electronic equipment and systems for industrial, commercial and domestic purposes. Electricians may also work on electrical transmission and distribution equipment.

Electricians:

- read electrical, architectural and mechanical diagrams, drawings or specifications to determine job requirements
- plan the layout of wiring systems
- test for, locate and repair electrical malfunctions
- install electrical and electronic control systems and insulated cables
- install electrical equipment such as storage heaters, water heaters, electrical signs, switchboards and motors
- assemble electrical and electronic components and appliances
- connect electrical equipment to power supplies
- connect switches, outlets and other fittings
- connect circuit breakers
- maintain automated production processes.

Electricians may work in workshops, in private homes or in manufacturers' factories. They may have a considerable amount of contact with the public, work in confined spaces and have to stand for long periods. They may also be required to work at heights on masts, towers and roofs.

Electricians must be aware of safety regulations and must wear and use supplied protective equipment to minimise risks.

Personal Requirements

- Enjoy mathematical and technical activities
- Good hand-eye coordination
- Good eyesight (may be corrected) and normal colour vision
- Logical thinking and diagnostic ability
- Aptitude for mechanics and electronics
- Able to do precise and detailed work
- Able to work independently or as part of a team
- Able to cope with the physical demands of the job
- Good communication skills

Education and Training

To become an electrician you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10 and some may prefer Year 12.

Additional Information

After completing your apprenticeship or traineeship, you will need to apply for a licence to perform electrical work from the relevant government department or authority in your state or territory.

Employment Opportunities

Electricians are employed in a range of industries, including manufacturing, mining, minerals, construction, energy and water supply, storage and transport, domestic and commercial electronics service and retail. Some work for government organisations, while others work as contractors on their own behalf or are employed by contractors.

The data communications and IT aspects of the industry are becoming increasingly important as new technologies alter the way businesses operate. Recent developments, such as home automation and the integration of systems such as data communications, suggest the current rapid rate of technological change in the industry will continue to accelerate.

There are growing opportunities to work as a renewable energy electrician and to design and install photovoltaic (solar power) systems. Additional training is available.

Promotion to supervisory, technician, engineering and management positions is possible with experience and further training.

With experience, and some business training, electricians may apply to gain an additional electrical contractor licence to run a business.

Related Jobs

Aircraft Maintenance Engineer (p 137); Broadcasting Technician (p 97); Business Equipment Technician (p 280); Electrical Linesperson (p 290); Engineering Tradesperson - Mechanical (p 293); Instrument Fitter (p 300); Instrumentation Tradesperson (p 301); Lift Mechanic (p 303); Refrigeration and Air Conditioning Mechanic (p 316); Security System Technician (p 319); Telecommunications Technician (p 324).

Electronics and Communications Technician

Also known as Electrotechnology Assembler and Electrotechnology Technician

Electronics and communications technicians diagnose faults and repair electronic devices, including audiovisual, broadcast, business and medical equipment.

Electronics and communications technicians:

- attend to breakdowns in electronics and communications equipment

- diagnose, test and rectify faults in electronic circuits and apparatus
- troubleshoot digital subsystems, amplifiers and circuits
- find and repair faults in complex power supplies
- service broadcast, microwave and satellite technology
- service analogue, digital and data equipment and signals
- service fire and security alarm systems
- repair cameras, television receivers, DVD players, computers, and business and medical equipment
- dismantle, assemble and fabricate electrotechnology assemblies
- install extra low voltage wiring systems
- install electrical and electronic control systems.

Electronics and communications technicians may work in workshops, private homes or manufacturers' factories. They may have a considerable amount of contact with the public. They may also work in confined spaces, have to stand for long periods and be required to work at heights on masts, towers and roofs.

Electronics and communications technicians must be aware of safety regulations and are often required to wear and use supplied protective equipment.

Personal Requirements

- Enjoy mathematical and technical activities
- Good hand-eye coordination
- Good eyesight (may be corrected) and normal colour vision
- Aptitude for mechanics and electronics
- Able to do precise and detailed work
- Good communication skills

Education and Training

To become an electronics and communications technician you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10 and many prefer Year 12.

Additional Information

Depending on the specific work being carried out, some electronics and communications technicians may be required to hold an electrical or electricians licence.

Employment Opportunities

Electronics and communications technicians are employed in the manufacturing, mining, construction, housing and domestic, communication services, medical, wholesale and retail industries. Some work as contractors on their own behalf, while others are employed by other contractors.

Promotion to supervisory, engineering and management positions is possible with experience and further training.

Job opportunities depend on the level of activity in the economy, especially in the building, mining, mineral processing, petrochemical and manufacturing industries. They also depend on consumer spending, particularly in the electronics sector.

Related Jobs

Audiovisual Technician (p 96); Broadcasting Technician (p 97); Business Equipment Technician (p 280); Electrician (p 291).

Engine Reconditioner

$2,062 | Medium skill | Stable

Also known as Automotive Machinist

Engine reconditioners set up and operate machinery to restore and recondition the machined surfaces of engines and related vehicle components.

Engine reconditioners:

- dismantle, check and inspect engines for wear
- re-grind camshafts and crankshafts
- repair and recondition cylinder heads and cylinder blocks
- check various components using micrometers and dial indicators
- diagnose reasons for engine failure
- pressure-test cylinder blocks and cylinder heads
- install engines in cars, boats, trucks or tractors
- assemble engines after repair
- balance tailshafts, crankshafts and flywheels.

Engine reconditioners work in specialised workshops, sometimes concentrating on one aspect of the job.

Personal Requirements

- Enjoy practical and manual activities
- Mechanical aptitude
- Good eyesight (may be corrected) for precision work
- Able to keep up to date with technological change

Education and Training

To become an engine reconditioner you have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Engine reconditioners work in automotive engine re-manufacturing companies. They may undertake post-apprenticeship courses in the motor mechanic, automotive, electrical, fitting and turning, and engine management fields. This can lead to specialisations in performance development or specialist modification work. Qualified tradespeople with advanced academic knowledge in production engineering may take up positions as technical officers or technicians and work with design engineers.

Some engine reconditioners complete courses in business management and become owners of their own businesses. Other career options include positions in industry for teachers and trainers, technical sales representatives or field representatives.

Engineering Tradesperson – Fabrication

Also known as Metal Fabricator

Fabrication engineering tradespersons cut, shape, join and finish metal to make, maintain or repair metal products and structures.

They may produce moulds or patterns for metal castings, apply coatings and work with a variety of materials.

Fabrication engineering tradespeople:

- examine detailed drawings or specifications to find out job, material and equipment requirements
- cut, roll, shape, bend, mould, spin, heat or hammer metal products to fabricate parts or sub-assemblies
- heat treat metal parts and components
- set up and/or operate hand and machine tools, welding equipment or Computer Numerically Controlled (CNC) machines
- assemble parts and structures by lining up and joining them by welding, bolting or riveting
- finish products by cleaning, polishing, filing or bathing them in acid solutions, or by applying protective or decorative coatings.

Fabrication engineering tradespeople work in workshops or production areas that can be noisy, hot and dusty. They usually spend most of their day standing and often need to bend, crouch or climb. Some may be required to work in confined spaces or at heights, and shift work may be involved. They may work in a team or alone. Workshops are generally spacious, ventilated and well lit.

Fabrication engineering tradespeople must be aware of safety regulations and must wear protective equipment to minimise heat and noise levels, and to guard against corrosive chemicals.

Recent changes in the industry are leading to a number of trade jobs being merged into broad occupational areas. The new training structure allows apprentices to develop a mix of skills from the traditional trades or occupations.

Specialisations

- Blacksmith
- Boilermaker (Heavy Fabrication)
- Engineering Patternmaker
- Foundry Worker
- Moulder/Coremaker
- Sheetmetal Worker (Light Fabrication)
- Welder - First Class

Personal Requirements

- Enjoy working with machines
- Interested in computer-programmable machinery
- Able to cope with the physical demands of the job
- Strength to handle materials, tools and machines
- Good hand-eye coordination
- Able to work in a team or independently
- Patient
- Able to carry out accurate work
- Safety-conscious

Education and Training

To become a fabrication engineering tradesperson you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Some fabrication engineering tradesperson roles require working at heights or in confined spaces. When working at heights, industry standards require tradespeople to complete a Work Safely at Heights short course provided by a Registered Training Organisation.

Tradespeople who are required to work in confined spaces must have a Confined Space Entry Permit.

Employment Opportunities

Fabrication engineering tradespeople work for engineering and construction firms, motor vehicle and other manufacturers, the minerals industry, shipyards, and electricity and gas supply authorities. Some are employed by federal, state or territory government departments, or local government authorities. They may work in metropolitan areas, large regional industrial centres, and on remote mining and processing projects.

Job opportunities depend on the level of local and overseas demand for Australian-manufactured goods and for minerals and energy products, the rate of technological change, and the number of new projects in heavy engineering, mining or steel construction.

With experience and further study, competent tradespeople can upgrade their qualifications to technician, associate, technologist or engineer level.

Related Jobs

Locksmith (p 304); Metallurgist (p 145); Model Maker (p 107); Process Plant Operator (Oil and Gas) (p 313); Product Assembler (p 313); Vehicle Body Builder (p 331).

Engineering Tradesperson – Mechanical

Also known as Engineering Technician - Mechanical , Mechanical Engineering Technician , Mechanical Engineering Tradesperson and Turner

Mechanical engineering tradespersons carry out a range of mechanical work on machines, subassemblies and manufactured parts using a range of processes, tools and machines. Recent changes in the industry have resulted in a number of trade jobs being merged into broad occupational areas. The new training structure provides a mix of skills across a number of traditional occupations, while also allowing apprentices to develop specific skills.

Mechanical engineering tradespeople:

- examine detailed drawings or specifications to determine job, material and equipment requirements
- set up and adjust metalworking machines and equipment
- operate machines to produce parts or tools by turning, boring, milling, planing, shaping, slotting, grinding or drilling metal stock or components
- fit and assemble metal parts, tools or subassemblies, including welding or brazing parts
- cut, thread, bend and install hydraulic and pneumatic pipes and lines

- dismantle faulty tools and assemblies and repair or replace defective parts
- set up and/or operate hand and machine tools, welding equipment or Computer Numerically Controlled (CNC) machines
- check accuracy and quality of finished parts, tools or subassemblies.

Mechanical engineering tradespeople usually work in workshops or production areas that can be noisy, hot and dusty. They may spend most of their day standing and often need to bend, crouch or climb.

They must be aware of safety regulations and wear protective equipment (earmuffs, for example) to maintain personal safety in the workplace.

Specialisations

- Fitter
- Gunsmith
- Metal Machinist
- Toolmaker

Personal Requirements

- Enjoy technical work
- Able to cope with the physical demands of the job
- Good hand-eye coordination
- Able to work independently or as part of a team
- Practical ability
- Attention to detail
- Normal hearing

Education and Training

To become a mechanical engineering tradesperson you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

To use or be in possession of firearms, you need to hold a firearms licence. To deal in or repair firearms, you need to hold a firearm dealers licence. You may be required to undergo training in the safe handling and use of firearms. Contact the police department in your state or territory for further information.

Employment Opportunities

Mechanical engineering tradespeople are employed by engineering workshops, manufacturing firms, mining and mineral processing companies, the oil and gas industry and utilities, and government organisations and municipal authorities.

Fitters and gunsmiths may have self-employment opportunities.

Demand is affected by levels of activity in the manufacturing, mining, transport, construction, electricity, gas and water sectors, as well as advances in technology.

With experience and further study, competent tradespeople can upgrade their qualifications to the technician, associate, technologist or engineer level.

Related Jobs

Air Force Trades (p 151); Army Trades (p 153); Electrician (p 291); Engineering Tradesperson - Fabrication (p 293); Locksmith (p 304); Marine Engineer (p 142); Process Plant Operator (Oil and Gas) (p 313); Product Assembler (p 313); Security System Technician (p 319); Shipwright (p 320); Tool and Die Setter (p 326).

Facilities Officer

Facilities officers provide assistance to ensure the day-to-day smooth management and operation of a building's infrastructure through administrative support and, at times, overseeing maintenance tasks.

Facilities officers:

- log, analyse and track maintenance requests
- issue work orders to appropriate tradespeople or maintenance officers
- match work orders to invoices and send invoices for payment
- distribute, archive and coordinate documentation
- conduct routine cleaning inspections with cleaners and facilities managers
- coordinate recycling and waste management reports
- set up meetings, conferences and function rooms
- collect and distribute mail
- suggest initiatives to improve operating practices, such as increasing energy efficiency.

Personal Requirements

- Good interpersonal, communication and customer service skills
- Able to work in a team
- Able to assess and prioritise tasks
- Good computer literacy
- Able to use initiative and work unsupervised
- Excellent organisational skills

Education and Training

You can work as a facilities officer without formal qualifications. You will probably get some informal training on the job.

You can also become a facilities officer through a traineeship in Property Services (Operations). Entry requirements may vary, but employers generally require Year 10.

Entry to this occupation may be improved if you have qualifications in facilities management or a related field such as architecture, business, management, property or planning. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Institutions have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

The Facility Management Association of Australia (FMA Australia) offers a range of professional development courses relevant to all levels of the facilities management sector. Contact FMA Australia for more information.

Employment Opportunities

Facilities officers work for public and private organisations that manage buildings and facilities, and may be employed in most industries, including finance, defence, education, retail, public administration and safety, entertainment and manufacturing.

With experience, and sometimes further training, facilities officers may take on management responsibilities

Floor Finisher and Coverer

Medium skill Moderate

Floor finishers and coverers install and repair floor coverings such as carpet, vinyl, rubber, cork, parquetry and timber flooring. They may specialise as hard floor finishers, textile layers or resilient layers.

Floor finishers and coverers:

- ensure floors are firm, dry and clean, and repair minor defects before laying coverings
- measure areas to be covered, and estimate and order quantities of floor coverings
- fix underlays of hardboard sheets, rubber or felt
- lay covering materials over the floor, match patterns, cut shapes around fixtures and trim edges
- fix floor coverings and fit edge trims in doorways
- sand, stain and finish a variety of timber floors.

Floor finishers and coverers work in small teams. Conditions can be dusty, and the work involves a lot of bending, stretching, kneeling and carrying. Floor finishers and coverers have a high level of contact with the public, retailers, builders and other tradespeople.

Education and Training

To become a floor finisher and coverer you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Floor finishers and coverers carrying out work above a certain value (as determined by state or territory regulations) must either be accredited as, or work under the supervision of, a registered building practitioner.

Employment Opportunities

Many floor finishers and coverers set up their own businesses and work as subcontractors to retailers or floor covering firms. Some work for retail organisations and may combine the duties of retail sales and floor covering.

Trade qualifications are often desired, but not essential. Opportunities are dependent on building industry demand, but this is less likely to affect qualified tradespeople.

Related Jobs

Upholsterer (p 330).

Florist

Medium skill Stable

Florists prepare floral arrangements such as bouquets, sprays, wreaths and vases of flowers. They also organise the storage, sale and delivery of floral arrangements.

Florists:

- design appropriate floral arrangements based on discussions with clients about their requirements, considering the type of occasion and budget
- select flowers and greenery, taking into account their expected lifespans, and trim flowers to a suitable length, strengthening them with wire if necessary
- arrange flowers and greenery in vases, or secure them to a wire or plastic base, and finish the arrangement with ribbons or other trimmings
- ensure flowers remain in good condition by taking into account the temperature, watering requirements and storage needs
- arrange local delivery of flowers, and relay interstate and overseas orders
- arrange dried, paper, silk or latex flowers and fruits, and other materials
- decorate churches and other venues for weddings and other special occasions
- rotate inventory and manage stock for in-store displays, preorders and daily sales
- take part in management and administration, such as working out costs and pricing of floral arrangements, maintaining financial records and supervising staff.

Florists may need to attend flower markets early in the morning. They have a high level of contact with the public.

Personal Requirements

- Enjoy artistic and creative activities
- A good sense of colour, texture and design
- An appreciation of different varieties of flowers
- Good communication skills
- Sound business skills (if interested in operating a business)
- Attention to detail

Education and Training

To become a florist you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a florist through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Florists mainly work for small retail outlets in metropolitan areas and large country towns. Many are self-employed. Some may be employed on a part-time basis.

Florists usually begin their careers as florists' assistants, which mainly involves serving customers. They then move on to wiring flowers or making up sprays, and eventually to working unsupervised in all areas. The demand for flowers tends to be seasonal, with peak periods being Christmas, Valentine's Day and Mother's Day. Advancement opportunities for florists are mainly to supervisory positions and self-employment.

Related Jobs

Craftsperson (p 98); Horticultural Tradesperson (p 300).

Food Process Worker

$1,208 Entry level Strong

Food process workers operate machines and prepare foods for processing using a wide range of equipment and methods.

Food process workers:

- receive, check and store raw materials
- operate conveyor and processing equipment
- take samples and check products for dispatch
- check boxes or bins of fruit and vegetables as they are delivered and organise weighing and storage
- prepare and sort fruit and vegetables for processing and feed them into machines

- handle live or slaughtered poultry and prepare for cooking or further processing
- operate machinery for chemical treating, size grading, crushing, extracting juice, mixing, freezing and drying foods
- operate machinery to blend flour, meal and feed
- sterilise equipment and keep processing areas clean.

If involved in the storage and conservation of grain, food process workers may take samples of grain for analysis, keep records of silo stocks and sew bags using industrial sewing machines.

Those involved in grain mill work do a lot of lifting, pushing and dragging. Conditions may be dusty, noisy, hot or cold depending on the processes being carried out.

Personal Requirements

- Good communication skills
- Enjoy practical work
- High standard of personal cleanliness
- Aptitude for technical activities
- Attention to detail
- Good hand-eye coordination
- Able to cope with the physical demands of the job
- No skin allergies or chest complaints.

Education and Training

You can work as a food process worker without formal qualifications. You will probably get some informal training on the job.

You can also become a food process worker through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

For certain food processing work, such as poultry processing, you may need a forklift licence. see the separate entry for Forklift Operator for further information.

Employment Opportunities

Food process workers are employed in confectionery, flour, poultry, fruit and vegetable processing firms, as well as other food, beverage and pharmaceutical processing firms. They also work in wineries, breweries and soft drink plants. Processing work tends to be seasonal, in line with crop harvesting times. This means that companies must regulate production to ensure that a range of products are available all year round. In some cases they operate on a reduced level for much of the year and take on temporary staff during peak periods.

Related Jobs

Winery Worker (p 274).

Footwear Worker

Lower skill

Decline

Also known as Shoemaker

Footwear workers make shoes, boots and sandals using hand and machine tools.

The footwear industry has become more mechanised and raw material passes through many stages before the finished article is produced. Different sets of specialised skills are required for each stage of production.:

Personal Requirements

- Enjoy practical and manual activities
- Able to perform precise and detailed work
- Good eyesight (may be corrected)
- Normal colour vision

Education and Training

You can work as a footwear worker without formal qualifications. You will probably get some informal training on the job.

You can also become a footwear worker through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Footwear workers are employed by shoe manufacturers. Most footwear establishments are small, employing fewer than 50 people.

With experience and further training, it is possible to progress to technical or supervisory levels. You may also be able to move into areas of footwear design or into other areas of the footwear industry.

Related Jobs

Textile Mechanic (p 324).

Forklift Operator

$1,113

Lower skill

Moderate

Also known as Forklift Driver

Forklift operators drive forklifts to shift and stack bales, cartons, containers, crates and pallets of goods in areas such as timber yards and warehouses. They may also move shipping containers on the waterfront.

Forklift operators:

- lift, stack and unstack articles and materials using diesel, electric, gas or petrol powered trucks equipped with fork attachments
- move raw materials and finished goods to processing or dispatch areas of factories
- ensure goods are stored in the correct area of a warehouse so they may be located easily when making up orders
- load transport vehicles, ensuring loads are evenly and securely placed
- service and make minor adjustments to the forklift
- keep a record of daily operations.

Forklift operators work indoors and outdoors. They may be required to work shifts and may have some contact with the public.

Personal Requirements

- Enjoy practical and manual activities
- Able to judge distances
- Safety-conscious
- Good hearing and eyesight (may be corrected)
- Meet appropriate age restrictions

Education and Training

To become a forklift operator you usually have to obtain a licence to Perform High Risk Work. To gain a licence, you will need to complete units of competency at an approved Registered Training Organisation and work under the supervision of a licensed operator. You will also need to keep an approved logbook to record competencies achieved during training. Assessment by an independent assessor will then be required. The Perform High Risk Work Licence is issued under the National Standard for Licensing Persons Performing High Risk Work.

You can also become a forklift operator through a traineeship.

Entry requirements may vary, but employers generally require Year 10.

Additional Information

You must be 18 years of age to be eligible to obtain a Perform High Risk Work Licence. However, training may commence at a younger age.

Employment Opportunities

Forklift operators work in warehouses in the wholesale, manufacturing, freight forwarding and primary industries. Federal, state and territory government departments also employ forklift operators. Some forklift operators also perform other tasks such as stores or clerical work.

Related Jobs

Airline Baggage and Freight Handler (p undefined); Crane Operator (p 287); Furniture Removalist (p 297); Mobile Plant Operator (p 307).

Funeral Attendant

Also known as Funeral Director's Assistant

Funeral attendants assist with the handling of people who have died, the preparation for funerals, the transportation of the deceased, placement of coffins, assisting at the funeral ceremony and the maintenance of funeral premises.

Funeral attendants:

- collect the body from the hospital, morgue or place of death
- assist with preparing the body and placing it in the coffin
- escort mourners to funeral chapels
- arrange burial equipment such as mats and lowering straps
- distribute and collect attendance and tribute cards
- drive passenger vehicles, mortuary vans and hearses
- clean funeral homes, chapels and hearses
- arrange floral tributes
- assist as coffin or casket bearers.

The work of funeral attendants may be demanding and sometimes stressful. They are often required to work irregular hours, including evenings and weekends, and are often required to be on call to meet their clients' needs. In small companies, one person may perform a variety of tasks, which requires a broad range of skills and a flexible attitude.

Specialisations

- Embalmer
- Funeral Director

Personal Requirements

- Enjoy helping people
- Neat personal appearance
- Tactful and sympathetic
- Good communication skills
- Emotional maturity
- Able to cope with the physical demands of the job
- Good driving record
- Good organisational skills

Education and Training

You can work as a funeral attendant without formal qualifications. You will probably get some informal training on the job.

You can also become a funeral attendant through a traineeship. Entry requirements may vary, but employers generally require Year 10. You may need to have access to, or be working in, a funeral home in order to complete course requirements.

Additional Information

Most employers require you to have a drivers licence.

Employment Opportunities

Opportunities to enter this field are limited due to low turnover of staff. Funeral attendants usually only progress to a funeral director or manager position after working in the business for a long time. It may be possible to set up a new business; however, most firms in this industry are well established.

Related Jobs

Civil Celebrant (p 284); Events Coordinator (p 263).

Furniture Removalist

Furniture removalists move domestic and commercial furniture between different locations, within the state or territory and nationwide.

Furniture removalists:

- inspect the house or office at the pick-up address to see what has to be moved, then pack and label items if required
- load goods onto the truck either by hand or using a forklift, trolleys, lifting straps or lifting hooks
- use pads and pieces of hessian to ensure items such as fridges, couches and beds are not damaged
- ensure the load is correctly placed and secured to avoid any damage to the truck or to the goods
- drive defensively and handle all types of road conditions
- unload goods and move them into the drop-off address, unpacking if required
- check items against inventory, noting any wear and tear or damage
- conduct a general maintenance check of the truck and clean the vehicle
- provide customer service.

Furniture removalists may work long hours and be away from home for extended periods, especially for interstate and international removals.

Personal Requirements

- Enjoy practical work
- Mechanical aptitude
- Safe driving record
- Able to cope with the physical demands of the job
- Good communication skills

Education and Training

You can work as a furniture removalist without formal qualifications. You will probably get informal training on the job.

You can also become a furniture removalist through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

You must hold the appropriate licences to drive vehicles and operate machinery.

You may become an accredited furniture removalist with the Australian Furniture Removers Association (AFRA). For more information, please contact the organisation.

Employment Opportunities

Most furniture removalists work as contractors for large removal companies. Some are owner-operators working for themselves. A small number are company employees, although this is becoming increasingly rare.

Most furniture removalists work in the metropolitan area.

Related Jobs

Crane Operator (p 287).

Garbage Collector

Garbage collectors collect household, commercial and industrial waste for disposal or recycling.

Garbage collectors:

- ride in or on garbage trucks
- collect waste and load it into bins or trucks
- return empty domestic bins to footpaths
- report incidences of graffiti
- operate forklift and compacting equipment
- drive trucks, street-sweeping machines or machinery at rubbish tips.

Garbage collectors may operate their own business or work within a partnership collecting garbage bags and other rubbish from domestic and commercial premises. Garbage collectors work outdoors in all weather conditions. They may work early in the morning and at night.

Personal Requirements

- Enjoy outdoor and practical work
- Able to cope with the physical demands of the job

Education and Training

You can work as a garbage collector without formal qualifications. You will probably get some informal training on the job.

You can also become a garbage collector through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

You will need appropriate licences to drive vehicles and operate machinery. Truck drivers and garbage collectors involved in transporting waste products and toxic or flammable substances must have suitably endorsed licences.

Employment Opportunities

Most garbage collectors work for private rubbish removal companies. Their services are then contracted by local councils and corporations.

With experience and further training, it is possible to progress to supervisory and management positions.

Related Jobs

Cleaner (p 259); Truck Driver (p 329).

Glass and Glazing Tradesperson

Glass and glazing tradespersons cut, shape and install glass used in windows, doors and mirrors. They may also prepare and install glass used for structural purposes in residential, commercial and high-rise buildings.

Glass and glazing tradespeople:

- interpret drawings and plans or measure the space to determine the amount of glass required
- lay sheets of glass onto glass cutting tables and score (mark) the surface of the glass using a variety of glasscutters
- remove excess glass with notched tools or glass pliers
- cut, drill and notch holes in glass with diamond-tipped cutters and drills
- remove broken glass and mirrors and prepare surfaces for reglazing
- smooth and polish edges on a grinding or bevelling wheel
- fit the glass using putty, chemical compounds or rubber strips into timber, steel and aluminium frames
- assemble and secure parts of pre-made glass units, such as shop fittings, display cases and shower enclosures
- install metal window and door frames into which glass panels are fitted, such as for shower screens and sliding doors
- fabricate aluminium for domestic and commercial applications, and fit and install on site
- inscribe decorative edges on glass and mirrors
- read diagrams, drawings or specifications to determine job requirements.

The work falls into three areas: cutting the glass, bevelling or smoothing edges, and fitting or glazing glass into prepared openings.

Personal Requirements

- Enjoy practical work
- Steady hands for precise work
- Able to work at heights
- Good eyesight (may be corrected)
- Able to calculate and measure accurately

Education and Training

To become a glass and glazing tradesperson you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

In some states and territories, glass and glazing tradespeople carrying out work over a specified value may need to be accredited as, or work under the supervision of, a registered building practitioner.

If working on a construction site, glass and glazing tradespeople may also be required to undergo safety induction training and be issued with a Construction Induction Card (CIC).

Employment Opportunities

Many glass and glazing workers are employed in cities by building hardware and material suppliers, glass merchants, glaziers and glass processors. Some are self-employed and work mainly on small or domestic jobs, due to the high capital cost of equipment for commercial jobs.

With experience, and sometimes further training, glass and glazing tradespeople can progress to positions of leading hand, supervisor, sales representative, estimator or management. They can also be trained in the use of high-tech specialised equipment used in the manufacture of secondary products, such as toughened and laminated safety glasses, insulated glass and coated glass.

As with most building occupations, employment in this trade may depend on the level of activity in the construction and housing industries. Repair and maintenance work is always needed.

Greater mechanisation, such as the use of computerised cutting machines, has reduced opportunities for glass workers but this has been offset by the increased use of glass on commercial buildings.

Hairdresser

$1,025 | Medium skill | Moderate

Hairdressers cut, style, colour, straighten and permanently wave hair and provide clients with hair and scalp treatments. In most salons, the senior hairdressers and the more advanced apprentices cut and style hair. Apprentice hairdressers undertake routine tasks in the initial stages of employment, assisting senior hairdressers with preparing clients, shampooing, applying and removing simple hairdressing treatments, and sterilising and maintaining equipment. As apprentices gain experience they carry out more complex tasks under supervision.

Hairdressers:

- talk to clients about their requirements
- cut hair using clippers, scissors or razors
- shampoo, condition and rinse hair
- provide services such as colouring, bleaching, applying treatment, permanent waving (with chemical solutions), straightening and tinting
- dry hair and style it using brushes, combs, straightening irons and other equipment
- shave and trim beards and moustaches
- advise clients on hair care
- block (shape), clean, colour, adjust, curl and cut wigs and hairpieces
- attend hairdressing seminars and training in order to keep up to date with new products and techniques
- operate a cash register and computer
- perform reception duties such as answering telephone calls and making appointments
- sell retail products
- maintain client records
- clean the salon, work areas and equipment.

Hairdressers may be employed in women's, men's or unisex salons. They spend most of the day on their feet and are usually required to work staggered shifts to fit in with salon business hours. They have a high level of public contact, so they need to be well presented.

Personal Requirements

- No allergies to hair products
- Pleasant personality
- Good communication skills
- Able to work under pressure
- Good hand-eye coordination
- Patient
- Some creative flair
- Attention to detail
- Able and willing to follow instructions

Education and Training

To become a hairdresser you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

You can also become a hairdresser by completing a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Employment Opportunities

Most hairdressers are employed in hairdressing salons, usually working with four to six people. Some work in large department stores.

Hairdressers may also be employed as stylists for television, film, theatre or advertising agencies.

Those with good retail skills (selling products or additional treatments) are particularly in demand. Many hairdressers, after a number of years working in the industry, set up their own businesses, enter into partnerships or teach hairdressing.

Related Jobs

Body Artist (p 96); Make-up Artist (p 106); Nail Technician (p 308).

Heavy Vehicle Motor Mechanic

$1,436 | Medium skill | Stable

Heavy vehicle motor mechanics repair, maintain and test heavy vehicles, other engines and related mechanical components.

Heavy Vehicle Motor Mechanics:

- diagnose, overhaul, repair, tune, maintain and test diesel, petrol and gas-powered vehicles
- detect mechanical and electrical faults by using instruments that check charging and starting circuitry, batteries, ignition

and ignition timing, fuel injection systems and speed control, cylinder compression, engine condition, braking efficiency, and wheel balance and alignment
- repair and maintain the hydraulic components of diesel, petrol and gas engines that are used to power attachments such as hoists, booms, scrapers, buckets and augers
- use oxy, ARC, TIG and MIG welding, hand-fitting or machining processes to replace or repair faulty parts.

Heavy vehicle motor mechanics may work on trucks, buses, agricultural machinery, earthmoving equipment, and stationary engines, including generators, pumps, compressors and drilling rigs. They may have to work in regional areas when repairing agricultural, earthmoving and heavy transport machinery.

Personal Requirements

- Enjoy practical and manual activities
- Mechanical aptitude
- Good at mathematics
- Able to cope with the physical demands of the job

Education and Training

To become a heavy vehicle motor mechanic, you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Heavy vehicle motor mechanics are employed mainly by machinery dealers, some service stations, heavy vehicle repairers, road transport firms, bus companies and the minerals industry. Public and privatised authorities, such as those concerned with defence, communications, energy supply, public works and transport, also employ heavy vehicle motor mechanics. Some heavy vehicle motor mechanics may establish their own business.

Horticultural Tradesperson

$1,078 | Medium skill | Strong

Also known as Arborist , Groundsperson , Horticulturist and Tree Surgeon

Horticultural tradespersons maintain plants and planted areas, construct horticultural features and apply treatments to enhance plant growth and control pests.

Horticultural tradespeople:

- identify and correct soil deficiencies
- identify and treat pests and diseases affecting plants
- prepare fields, garden beds or lawn areas by cultivating soil and adding fertilisers and compost
- use growth regulators and other chemicals
- read landscape plans and construct rockeries, paths or ponds
- plant and transplant flowers, shrubs, trees and lawns
- maintain gardens by fertilising and trimming plants and ensuring that they are receiving adequate water
- prune trees and hedges to promote their health and increase the attractiveness of plants
- thin out, hoe, irrigate and fertilise crops
- maintain lawn and grass areas using machinery, fertilisers and chemicals
- service equipment such as tools, lawn mowers and heavy machinery
- operate and install irrigation and drainage systems
- plan and supervise the daily activities of other workers
- develop long-term plans, set budgets and manage the financial aspects of the organisation or business.

Horticultural tradespeople usually work outdoors and in all kinds of weather. Some of the work is physically demanding as it involves bending, lifting and the use of machinery such as tractors, rollers and edging machines. Protective clothing must be used when handling fertilisers and pesticides, and to prevent injury while using machinery.

Personal Requirements

- Enjoy practical and mechanical activities
- Able to undertake manual and heavy work
- Able to work safely with chemicals and machinery
- Able to work for long hours
- Able to work outdoors in all sorts of weather conditions

Education and Training

To become a horticultural tradesperson you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

The horticultural sector is one of the most important primary industries in Australia. There are many opportunities in this sector, from landscape gardening and turf management to service areassuch as marketing, finance and international trade.

Related Jobs

Agricultural Technical Officer (p 28); Farm Hand (p 32); Florist (p 295); Landcare Worker (p 36); Viticulturist (p 39).

Instrument Fitter

$1,149 | Medium skill | Decline

Instrument fitters assemble and install precise instruments that measure, indicate, transmit, record and control. Instrument fitters may specialise as camera repairers, scale adjusters or surgical instrument makers. Experienced instrument fitters may work with scientists to design, manufacture or modify laboratory equipment.

Instrument fitters:

- fit and assemble instrument parts such as circuit boards, power supplies and control units, springs, bearings, lenses and glass faces
- check instruments for accuracy and calibrate (to manufacturers' specifications), using standard weights and measures; pneumatic, electrical and electronic test equipment; and small hand tools
- install industrial instruments and equipment such as control panels, sensors, transmitters and controllers, meters and fixed cameras (if an appropriate licence is held)
- dismantle and re-assemble delicate mechanisms or electronic circuits
- overhaul instrument systems and repair or replace faulty parts using power tools and small hand tools
- check performance using testing and measuring instruments and make necessary adjustments
- set up computers and control equipment
- connect computers to control systems and check the operation of these systems.

Personal Requirements

- Enjoy practical and manual activities

- Good eyesight (may be corrected) and normal colour vision
- Able to do precise and detailed work
- Aptitude for technical activities

Education and Training

To become an instrument fitter you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Gaining dual-trade status through the study of mechanical instrument fitting electives, either during your apprenticeship or through post-trade studies, is encouraged in this occupation.

Employment Opportunities

Instrument fitters usually work for power stations, mining and smelting plants, the petrochemical and minerals industries, instrument manufacturers, hospitals and other government bodies. They may also be employed by firms dealing with photographic instruments, surveying instruments, weighing or analysis devices, and by scientific laboratories. There is an increasing use of instruments in industry to provide efficient control of various processes.

With experience, and sometimes further training, it is possible to become a supervisor or technician.

Job opportunities depend on the level of activity in the mining, mineral processing, petrochemical, manufacturing, and water and power supply industries.

Related Jobs

Aircraft Maintenance Engineer (p 137); Electrician (p 291); Instrumentation Tradesperson (p 301); Process Plant Operator (Oil and Gas) (p 313); Textile Mechanic (p 324).

Instrumentation Tradesperson

Instrumentation tradespersons install, modify, maintain and repair instrumentation used in measurement and control systems. These instruments measure and control temperature, pressure and flow in processes used in industries such as petro-chemical, mining, food and manufacturing.

Instrumentation tradespeople:

- install electronic instruments and control systems
- examine and test faulty electronic instruments and control systems to identify faults
- undertake calibration and ensure there is correct operation of instrumentation equipment
- repair and maintain electronic instruments and control systems.

Personal Requirements

- Enjoy technical and engineering work
- Able to analyse and solve problems
- Able to perform intricate work
- Aptitude for mechanics and electronics
- Able to cope with the physical demands of the job
- Good eyesight (may be corrected) and normal colour vision

Education and Training

To become an instrumentation tradesperson you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Gaining dual-trade status by undertaking both an instrumentation and electrical apprenticeship is encouraged in this occupation. Post-trade training is also available in new electronic technologies and advanced skills.

Employment Opportunities

Instrumentation tradespeople may work in the minerals and pulp and paper industries, power stations, oil refineries, chemical processing plants and hospitals. Industry is increasingly using instruments in the monitoring and control of various processes.

With experience, and sometimes further training, it is possible to become a supervisor or technician.

Related Jobs

Electrician (p 291); Process Plant Operator (Oil and Gas) (p 313).

Integrated Rating

Integrated ratings carry out maintenance and lookout duties on the decks and in the engine rooms of merchant ships.

Integrated ratings:

- maintain deck equipment, cargo gear, rigging, and lifesaving and firefighting appliances
- assist with standing lookout at sea, and alert deck officers when other vessels, navigation marks or hazards are sighted
- steer the ship under supervision
- secure cargoes and splice wires and ropes
- handle rope and wire mooring lines, gangways and ladders when the ship is berthing and unberthing
- maintain the cleanliness of decks and structures
- remove rust from, treat and paint the ship's sides and structures
- assist with maintaining watch in the ship's engine room
- assist with maintaining and repairing the ship's engines and mechanical equipment
- participate in safety drills under the direction of the ship's officers
- clean the ship's cargo compartment and the fresh water, ballast and oil tanks.

When steering the ship, on lookout duty or on watch, integrated ratings work under the direction of the officer of the watch. When in the engine room, they work under the direction of engineering officers. Integrated ratings may be required to work in confined spaces following safety protocols.

Personal Requirements

- Able to cope with the physical demands of the job
- Enjoy manual activities
- Able to pass a medical examination and eyesight test
- Normal colour vision
- Enjoy life at sea
- Mechanical aptitude

Education and Training

To become an integrated rating you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for more information.

You can become an integrated rating through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

In addition, you will need to complete nine months of sea time on board a seagoing ship prior to being awarded a Certificate of Proficiency in Integrated Rating by the Australian Maritime Safety Authority (AMSA).

Integrated ratings must be over 18 years of age at the time of completing their qualifications. In order to serve on board a ship, you will need to qualify for and obtain an AMSA Certificate of Medical Fitness.

Employment Opportunities

Integrated ratings work on coastal and overseas ships. There is a relatively small number of ships in the Australian merchant fleet, so positions can be competitive. There is an increasing demand for integrated ratings in the Australian offshore oil and gas industry.

Related Jobs

Deckhand (p 261); Marine Engineer (p 142); Navy Sailor (p 158); Ship's Officer (p 319).

Inventory and Supply Officer

Also known as Stock Clerk

Inventory and supply officers receive and dispatch goods, manage stock levels and record stock movement. With experience, and sometimes further training, it is possible to become an inventory control manager or supply manager.

Inventory and supply officers:

- prepare purchase orders
- receive, store and issue goods
- manage stock levels and distribute supplies from stock
- maintain stock records using manual or computerised systems
- prepare inventories
- find sources of supply and obtain quotes from suppliers
- price incoming goods, estimate the cost of requisitions or value of stock and store articles
- coordinate purchasing, warehousing and inventory functions.

Inventory officers normally manage the level of stock held by a company, while supply officers (a more senior position in large companies) are usually responsible for the coordination of purchasing, warehousing and inventory functions.

Personal Requirements

- Enjoy clerical and administrative activities
- Good planning and numeracy skills
- A methodical approach to work
- Good communication skills
- Aptitude for working with computer systems
- Able to pay attention to detail

Education and Training

You can work as an inventory and supply officer without formal qualifications. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become an inventory and supply officer through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Inventory and supply officers are employed in hospitals and government agencies, and in construction, defence, manufacturing, mining, service, transport, wholesale and retail firms.

Increased use of computers and automation in inventory and stores management has affected the nature of inventory and supply work, with many businesses moving towards a single, automated warehousing operation focusing on just-in-time delivery, rather than a number of smaller stores that maintain large amounts of stock.

Related Jobs

Logistics Clerk (p 304); Storeperson (p 322); Transport Clerk (p 329).

Leather Goods Maker

Also known as Leather Worker and Saddler

Leather goods makers make and repair leather articles such as handbags, wallets, gloves, belts, harnesses and saddlery (horse riding equipment). Leather goods makers may specialise in saddlery, harnesses and horse blankets, footwear, hats, whips, clothing, upholstery or special leather goods.

Leather goods makers:

- select suitable types and grades of leather
- draw patterns
- cut leather to size and shape using special cutting machines called 'clicking' and 'skiving' machines
- join pieces together with rivets, threads or adhesives
- sew by hand using needles
- fill saddles and collars with hair or flock (stuffing)
- attach buckles, eyelets and metal decorations, and emboss decorative patterns
- finish products with stain, dye, polish or coats of lacquer
- repair damaged goods.

Personal Requirements

- Enjoy practical and manual activities
- Good hand-eye coordination
- Able to perform detailed work

Education and Training

You can work as a leather goods maker without formal qualifications. You will probably get some informal training on the job.

You can also become a leather goods maker through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Leather goods makers are employed by leather companies, saddle makers, pastoral companies and craft workshops.

Related Jobs

Craftsperson (p 98); Upholsterer (p 330).

Lift Mechanic

Also known as Lift Electrician

Lift mechanics assemble, install, adjust, maintain and repair electric and hydraulic freight and passenger lifts and escalators. An experienced lift mechanic is able to perform more complex work functions and tasks, such as adjusting and tuning lifts to make sure they work safely and efficiently.

Lift mechanics:

- study drawings and lay out the position of steelwork, guide rails, motors, pumps and cylinders
- install lift guide rails and check that they are correctly aligned
- install cables, counterweights, pumps, motor foundations, escalator drives, lift cars, doors, entrance frames, and safety and control devices
- connect electrical wiring to control panels and electric motors
- test and adjust assemblies, including cables, wiring and electric controls, and adjust safety devices such as brakes and speed governors
- carry out regular maintenance programs on lifts and escalators
- use laptop computers in the field for tuning and diagnostic work in fault finding
- find the causes of faults in motors, brakes, switches, and electrical and electronic control systems
- repair hydraulic or mechanical brakes by adjusting or replacing valves, ratchets, seals and brake linings.

Lift mechanics working on installation and modernisation projects generally work in teams on building construction sites. In these instances they work closely with building and other specialist tradespeople.

Lift mechanics may need to work weekends, on call or after hours to perform emergency repairs. They may also spend a great deal of time traveling to various locations.

Personal Requirements

- Enjoy technical work
- Able to cope with the physical demands of the job
- Normal colour vision
- Able to work at heights and in confined spaces
- Good communication and interpersonal skills
- Aptitude in mechanical and electrical reasoning
- Able to work independently or as part of a team

Education and Training

To become a lift mechanic you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Modern lifts are controlled by computers and complex electronic systems. As a result, there is an increasing need for lift mechanics to have a knowledge of electronics.

After completing your apprenticeship, you will need to apply for a licence to perform electrical work.

Employment Opportunities

Lift mechanics are employed by companies that require specialised electrical and mechanical work to install, maintain, modernise, service and repair lifts, escalators and moving walkway systems.

Maintenance and repair is an ongoing source of work. Installation jobs depend on the construction of new buildings.

Job opportunities depend on the level of multistorey construction activity, changes to building regulations and replacement or repair requirements.

Light Engine Mechanic

Light engine mechanics test, service and repair small engines and parts in boats and other small engine-powered equipment such as chainsaws, brush-cutters, lawnmowers, pumps and stationary engines.

Light engine mechanics:

- determine mechanical and electrical faults through discussion with users, listening to engines and using specialised testing equipment
- dismantle faulty engine assemblies, check parts using precision measuring equipment and refer to workshop manuals
- clean, lubricate and tune engines to ensure they run properly
- repair damaged or faulty parts by straightening, welding, machining or hand-making new metal parts
- repair and adjust electrical faults
- remove small dents in panels, spray paint and do minor trim repairs
- set up and water-test outboard motors.

Personal Requirements

- Enjoy practical and manual activities
- Able to cope with the physical demands of the job
- Normal eyesight and hearing
- Aptitude for technical activities
- Problem-solving skills
- Able to read and interpret technical information from service manuals
- No skin allergies or reactions to grease, oil or petrol.

Education and Training

To become a light engine mechanic, you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Employees of franchised dealerships usually receive training in the service and repair of machines from their manufacturer.

Employment Opportunities

Light engine mechanics are employed by outboard engine firms, chainsaw dealers and lawnmower repair firms. They may also run their own businesses. Career opportunities include field service, supervision, sales, management and teaching.

Locksmith

Locksmiths install, sell, test and maintain locks and related security devices and systems.

Locksmiths:

- sell and install high-security lock systems, key control systems, all types of mechanical locks and keyless-entry locks
- repair, replace or adjust damaged or defective components of doors, including door closers, hinges and electronic release mechanisms
- change mechanical and electronic key codes
- design, manufacture, install and manage restricted master key systems
- determine customer security requirements and assess risks through discussion and on-site inspection
- assist clients to gain entry to premises, automotive vehicles, safes or high-security storage containers such as filing cabinets
- recommend appropriate security and locking systems such as safes, strong rooms, alarms, closed-circuit television (CCTV), and door and window locks
- install, replace and maintain locking systems, alarms and access control systems
- test the performance of locks and security systems
- repair jammed, worn or damaged locks by manipulating, dismantling, repairing or replacing defective parts
- sell locks, safes and associated hardware
- cut new or duplicate keys for locks and other security systems and devices
- keep records of specifications of installed locking systems.

Locksmiths may be required to work weekends, on call and after hours. Some locksmiths work in mobile units, travelling between jobs. They may also be required to work in confined spaces and outdoors.

Personal Requirements

- Enjoy technical work
- Able to cope with the physical demands of the job
- Able to lift heavy items
- Good hand-eye coordination
- Able to work independently or as part of a team
- Attention to detail
- Patient and tactful when dealing with customers
- Good vision and hearing
- Good verbal and written communication skills

Education and Training

To become a locksmith you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

In some states and territories, locksmiths who install security equipment must undergo a National Police Check. Locksmiths working with security equipment may also be required to obtain a licence, or work under someone with a licence, issued by the police department or relevant regulatory body in their state or territory.

Membership of the Locksmiths Guild of Australia and Master Locksmiths Association of Australasia is available to anyone interested in this industry.

Employment Opportunities

Locksmiths are employed by locksmith and security firms. There may also be opportunities for self-employment. They can specialise in lock manipulation, key manufacture and identification, access control installations, safes and automotive work. Work may include domestic, commercial, government, retail and automotive situations.

Demand is largely dependent on concerns about security and security upgrades involving electrical security, access control and alarm monitoring systems.

Related Jobs

Engineering Tradesperson - Fabrication (p 293); Product Assembler (p 313); Security System Technician (p 319).

Logistics Clerk

Also known as Purchasing and Supply Logistics Clerk

Logistics clerks record and coordinate the flow of work and materials between departments, examine orders for goods, and prepare production schedules.

Logistics clerks:

- requisition supplies from stock and send orders to production departments and other firms
- confirm completion of orders and compliance with specified details
- receive and check purchase requests against inventory records and stock on hand
- examine orders and compile data for production schedules
- check inventories and prepare delivery schedules
- investigate and identify supply sources, and prepare and process purchase orders
- count incoming stock and reconcile it with requisitions
- update inventory and stock location records.

Logistics clerks may work in offices, storerooms and warehouses. Conditions in warehouses may be hot and dusty during summer and cold during winter. They usually work regular business hours, but may be required to work longer hours during busy periods.

Logistics clerks may use specially designed electronic inventory data collection devices. They may also be required to operate forklifts or other heavy machinery, and to wear high-visibility clothing and other safety equipment in warehouse situations.

Personal Requirements

- Enjoy clerical and administrative activities
- Good numeracy skills
- A methodical approach to work
- Good communication skills
- Excellent organisational skills
- Ability to work as part of a team
- Sound interpretation and analysis skills
- Attention to detail

Education and Training

To become a logistics clerk you usually have to complete a traineeship. Entry requirements may vary, but employers generally require Year 10.

You can also become a logistics clerk through a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you have a business or commerce degree with a major in logistics, supply chain management or a related field. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Logistics clerks who are required to operate a forklift will need to obtain a Perform High Risk Work Licence.

Employment Opportunities

Logistics clerks are employed by firms involved in the movement of goods. These include shipping agents, import/export companies, freight forwarding and storage companies, and road haulage firms. Wholesalers and large manufacturing firms may also employ logistics clerks.

Related Jobs

Administrative Assistant (p 51); Bookkeeper (p 54); Customs Broker (p 55); Transport Administrator (p 328); Transport Clerk (p 329).

Machine Operator (Non-metal Products)

$1,063 | Lower skill | Very strong

Machine operators in non-metallic mineral product industries operate plant machinery and equipment to produce ceramic, clay, glass and concrete products such as bricks, tiles, pottery, cement, lime, paving blocks and glassware.

Machine operators (non-metal products):

- weigh, measure and mix ingredients
- clean plant areas
- clean and lubricate equipment
- operate machines to combine and process ingredients or finish products
- monitor machine operations and adjust pressure, temperature, tension and other controls to ensure products match specifications
- collect samples for laboratory analysis
- measure and test products
- weigh and package products.

Machine operators may work in areas that are hot and noisy. They have to wear protective clothing and may have to work shifts.

Personal Requirements

- Enjoy practical and manual activities
- Aptitude for problem-solving
- Mechanical aptitude
- Able to multi-task
- Able to work as part of a team
- Safety-conscious

Education and Training

You can work as a machine operator without formal qualifications. You will probably get some informal training on the job.

You can also become a machine operator through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Depending on the tasks performed, machine operators may be required to obtain a licence to Perform High Risk Work. Licences to Perform High Risk Work are issued under the National Standard for Licensing Persons Performing High Risk Work.

You must be 18 years of age to be eligible to obtain a Perform High Risk Work licence. However, training may commence at a younger age.

Employment Opportunities

Machine operators are employed by manufacturers of bricks, ceramic tiles, cement and concrete products, pottery and terracotta roof tiles. Employment can also be found with foundries and glass or metal manufacturers. Promotion to team leader is possible for experienced operators.

Marine Surveyor

$2,123 | Very high skill | Moderate

Marine surveyors carry out inspections of passenger and cargo ships, commercial charter craft, fishing vessels, recreational craft and yachts.

Marine surveyors:

- examine and approve design plans of hulls and equipment, such as main propulsion engines, auxiliary boilers and turbines, electrical power generating plant, refrigeration and air conditioning plant and pumping systems
- inspect standards of construction and witness tests of materials
- inspect hulls, machinery and equipment during ship construction to ensure standards and legislative requirements are met
- conduct surveys throughout the ship's life to ensure standards are maintained
- perform inspections required by domestic statutes and international conventions
- witness tests and operation of emergency and safety machinery and equipment
- measure ships for tonnage and survey them for load line assignment
- attend court as an expert witness and assist with coronial enquiries
- investigate marine accidents.

Personal Requirements

- Enjoy the sea and maritime activities
- An inquisitive mind with attention to detail
- Good written communication skills
- Aptitude for using computers
- Able to work with a variety of people

Education and Training

To become a marine surveyor you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions you should contact your chosen institution for more information.

You can also become a marine surveyor with a degree in applied science, specialising in marine surveying. To get into this course you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of mathematics, chemistry and physics are normally required. Contact the Australian Maritime College at the University of Tasmania for more information.

Employment Opportunities

Marine surveyors work for port authorities, shipping companies, insurance companies, government agencies and classification societies. Private marine surveyors work for ship owners and operators, insurance companies, freight forwarders (companies that arrange for the transport of goods) and consignees (people who receive goods).

With the changing nature of the international shipping environment and technological advances, there is likely to be more emphasis on specialist maritime areas in the future at the expense of the traditional marine surveyor.

Depending on their area of work, a marine surveyor could be asked to travel overseas to investigate causes of accidents or damage to cargoes.

Related Jobs

Marine Engineer (p 142); Mechanical Engineer (p 143); Shipwright (p 320).

Meat Processing Worker

$1,028 | Entry level | Stable

Also known as Abattoir Worker , Meat Worker and Meatworker

Meat processing workers perform a wide range of tasks, including handling, slaughtering and processing livestock, operating processing and rendering equipment, dispatching products, and keeping records.

Meat processing workers:

- move and manage animals before they are slaughtered
- stun animals using an electrical device or cartridge gun
- bleed animals while they are unconscious
- remove hides/pelts and internal organs
- use saws to split the carcasses
- trim carcasses
- move carcasses to chillers and freezers
- break carcasses by boning and slicing meat cuts for sale and further processing
- pack the boned and sliced meat into cartons
- process hides and pelts
- process by-products
- load meat products into trucks.

Meat processing workers stand for most of the day. Hands and clothes may become soiled with blood or fat, but health regulations ensure that meat processing workers work under hygienic conditions. The areas in which they work are usually large, well lit and ventilated, and kept very clean. Employers usually provide a laundry service for uniforms.

Boner and Slicer - breaks down carcasses by removing bones and slicing meat so that it is ready for sale or further processing.

- Renderer - operates processing plants to produce meat meal, fertilisers and tallow.
- Slaughterer - works in the area where the animals are killed and the hides and internal organs are removed.

Specialisations

- Boner and Slicer
- Renderer
- Slaughterer

Personal Requirements

- Enjoy practical and manual activities
- Good hand-eye coordination
- Able to cope with the physical demands of the job
- Able to work safely

Education and Training

You can work as a meat processing worker without formal qualifications. You will probably get some informal training on the job. You can also become a meat processing worker through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Once you are employed, you may be able to develop, and have recognised, additional skills under the Australian Meat Industry Training Package that will expand your career opportunities within this industry.

Employment Opportunities

Employment opportunities may be seasonal due to fluctuations in livestock production.

Milliner

$1,132 | Medium skill | Decline

Also known as Hat Maker

Milliners design and make hats and other headgear such as caps, berets, bonnets, fascinators and bridal headpieces, using materials such as felt, fabric, fur, leather, straw and artificial flowers.

Milliners:

- interpret fashion trends and use them in designing hats and other headgear
- mark and cut patterns to desired shape and size, lay the pattern onto fabric and cut around it
- shape, cut, twist, roll, fold and reinforce fabrics and other materials with wire to gain desired effect
- assemble hats by hand or using a sewing machine
- steam and press material into shape by hand and, if needed, stiffen it by using a special solution
- sew trimmings such as ribbons, buckles, braids or chains onto hats
- operate semi-automatic blocking machines for mass production
- alter, renovate and re-block (re-shape) existing hats
- package and dispatch hats for customers
- display, fit and sell hats and accessories.

Milliners employed by mass-production firms usually perform single tasks, such as trimming hats with ribbon or sewing in headbands. Milliners making 'semi-model' (limited production) hats hand trim shapes that have been moulded by machine.

Highly skilled milliners create designs in fabric or on paper that can be followed by other milliners.

Personal Requirements

- Enjoy practical and manual activities
- Good hand-eye coordination
- Artistic sense of colour and design
- Patient and able to persevere
- Understanding of and interest in fashion trends

Education and Training

To become a milliner you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a milliner by completing a traineeship in Millinery. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Most milliners are self-employed or work for small, boutique retail businesses, selling model (one-off) and semi-model hats. Milliners who wish to start up their own business usually have a lot of experience and require the necessary start-up money and business ability. There are limited opportunities to work in hat manufacturing firms that mass-produce hats by hand.

You should contact individual milliners to obtain information about employment conditions and training requirements, which can vary from firm to firm.

Miner

Miners operate equipment to excavate, load and transport coal, ore, mineral sand and rock, either underground or in open-cut mines.

Miners:

- cut drives into the ore body using specialist equipment
- extract coal or ore by drilling, blasting or excavating
- load ore into mine cars, trucks or conveyors for transport to the stockpile or mine surface
- undertake development work such as opening up new shafts, drives, air vents, rises and crib rooms
- support the walls and roofs in underground mines with rock bolts and erect wooden or steel props, pillars and arches
- install lighting, pumps, cabling and other equipment to service the mine
- monitor the operation of plants and ensure the safety of other workers on mining sites and during drilling operations
- operate auxiliary plants (such as pumps) to expel air, water and mud.

Mines are often located in remote areas. Miners and plant operators may have to work in dusty, hot and noisy conditions. Many workers are employed at mine sites on a fly-in, fly-out basis, usually flying from a base location to the mine site, where they work for a number of weeks and then return to the base location. Although they work as part of a team, miners generally work without direct supervision. Mining operations around Australia have a zero tolerance policy for drugs and alcohol.

Personal Requirements

- Enjoy practical and manual activities
- Aptitude for mechanical equipment operation
- Able to tolerate physically demanding work, including shiftwork
- Willing to work in accordance with occupational health and safety rules
- Meet age restrictions, if applicable

Education and Training

To become a miner you usually have to complete a traineeship. Entry requirements may vary, but employers generally require Year 10.

You can also become a miner through a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Employment Opportunities

Miners are employed by mining companies, often in remote regions. Australian mines are generally highly automated and employment is normally in machine-operating positions. Employment opportunities fluctuate depending on the level of activity in the resources sector.

Related Jobs

Mobile Plant Operator (p 307).

Mobile Plant Operator

Mobile plant operators drive backhoes, bulldozers, excavators, front-end loaders, graders, scrapers, skid-steer loaders, rollers and forklift trucks to level, excavate, move and load earth, rock and other material.

Mobile plant operators:

- prepare machines for operation
- load and unload equipment from low loaders and move it around worksites
- select, change and operate special attachments such as winches, scrub clearers, rippers, pile drivers and rock-breaking hammers
- work from drawings and markers under the direction of supervisors and engineers
- back-fill trenches
- break up paving, rock and similar material by operating hydraulic or pneumatic breakers
- excavate or scrape earth, rock or rubble to the correct level and alignment
- load trucks with excavated fill
- drive machines to and from worksites
- service equipment by cleaning, lubricating and refuelling it, and make minor adjustments and repairs when necessary
- maintain duty of care for other users and work to occupational health and safety requirements.

The work conditions for mobile plant operators can be hot, muddy, dusty and noisy, but most earthmoving machines have soundproofed and air conditioned cabs for the operator.

Personal Requirements

- Enjoy practical and manual activities
- Able to work as part of a team
- Able to cope with the physical demands of the job
- Good eyesight (may be corrected)
- Good hand-eye coordination
- Able to work without supervision

Education and Training

You can work as a mobile plant operator without formal qualifications. You will probably get some informal training on the job.

You can also become a mobile plant operator through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Industry standards often require mobile plant operators to hold a licence to Perform High Risk Work issued by the WorkCover or WorkSafe body in each state and territory. To gain a licence, you will need to register with an approved Registered Training Organisation and work under the supervision of a licensed operator, and keep an approved logbook to record competencies achieved during training. Assessment by an independent assessor will then be required. You must be 18 years of age to obtain a licence. However, training may commence at a younger age.

All those who work in the construction industry must undergo safety induction training and be issued with a Construction Induction Card (CIC).

Employment Opportunities

Major employers include earthmoving and civil construction contractors, private developers, mining and minerals processing companies and government authorities. Work projects vary in size and location. Sites may be located in the city, suburbs or country and are sometimes in remote areas.

Some plant operators may own and operate equipment on a contract hire basis, although the cost of equipment is high.

Related Jobs

Civil Construction Worker (p 284); Forklift Operator (p 296); Waterside Worker (p 332).

Motor Mechanic – Car

Motor mechanics service, repair and overhaul the mechanical parts of light motor vehicles, such as the engine, the transmission (clutch, gear box and differential), and the suspension systems (springs, steering, brakes, wheels and tyres).

Motor mechanics:

- discuss problems with car drivers or vehicle operators to discover faults
- listen to engines, fit and operate special test equipment, and test-drive vehicles
- repair or replace worn or faulty parts by removing assemblies such as engines, transmissions, differentials or steering gear systems, dismantling them and checking parts, referring to manuals as necessary
- reassemble, test, clean and adjust repaired or replaced parts or assemblies, using various instruments to make sure that they are working properly and putting them back into the vehicle
- tune engines using special electronic equipment and make fine adjustments (to carburettors, for example) for smoother running
- carry out minor body and trim repairs
- diagnose, repair and replace engine management and fuel injection components
- use oxy, electric, TIG and MIG welders
- test and repair electrical systems such as lighting, instrumentation, ignition and electronic fuel injection
- inspect vehicles and issue road worthiness certificates or list the work required before a certificate can be issued.

Motor mechanics work mainly in workshops and wear protective clothing. They need to keep up with changes in motor industry technology.

Due to advances in automotive technology, most vehicles now contain electronic controls and computers. As a result, knowledge in this area has become essential for motor mechanics and they are becoming more specialised in their areas of work. Motor mechanics may specialise as Automotive Air Conditioning Fitters or Brake Mechanics. For more details, see the separate entries for these occupations. They may also specialise as breakdown service patrol officers who give emergency mechanical assistance to members of an automobile association. Motor mechanics may progress to positions such as service manager, service adviser, technical sales representative, technical officer or diagnostic specialist.

Personal Requirements

- Enjoy practical and manual activities
- Able to work with hand tools
- Aptitude for technical activities
- Problem-solving skills
- Able to cope with the physical demands of the job
- Normal eyesight and hearing
- Drivers licence essential

Education and Training

To become a motor mechanic, you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Once you are employed, you may be able to develop, and have recognised, additional skills under the Automotive Industry Retail, Service and Repair Training Package that will expand your career opportunities within this industry.

Employment Opportunities

Motor mechanics are employed mainly by motor vehicle dealers, repairers and service stations. They also work for authorities concerned with defence, communications, energy supply, public works and transport, and for private firms with large fleets of vehicles. Motor mechanics working for large private firms service fleet vehicles, and those working for specialist firms service a particular part or make of vehicle. Some also work in the testing sections of vehicle manufacturing firms.

Promotion to supervisory positions is possible in large workshops. Some mechanics establish their own businesses. There is strong competition for available apprenticeships.

Related Jobs

Vehicle Body Builder (p 331).

Nail Technician

Nail technicians perform manicures and pedicures, which may include nail art, application of artificial nails, nail repair and other specialised hand and foot treatments.

Nail technicians:

- apply gel and acrylic nail enhancements and extensions
- perform manicures and pedicures
- use specialist tools and electrical equipment on nail enhancements

- apply decorative and airbrushed nail art
- maintain safe work practices and hygiene standards
- read and interpret product information to make safe and appropriate recommendations to clients
- conduct financial transactions
- perform reception duties (receiving bookings and arranging appointments, for example)
- perform routine housekeeping duties
- maintain client records
- provide advice about and sell nail products
- maintain knowledge of current industry standards and practices.

Working as a nail technician can be physically demanding. Repetitive activities and sitting for long periods can cause strain, while chemicals such as those used in acrylics and polish removers may pose a health risk if not used correctly. Personal protective equipment such as gloves, aprons, dust masks and safety glasses may be worn to minimise risk. Safety considerations include the welfare of both the technician and the client. Nail technicians have a high level of public contact.

Personal Requirements

- Neat personal appearance
- No allergies to products and chemicals used
- Pleasant and tactful manner
- A genuine interest in people
- Good interpersonal skills
- Excellent hand-eye coordination
- Patience
- Able to cope with the physical demands of the job
- Creative and artistic ability

Education and Training

You can work as a nail technician without formal qualifications. You will probably get some informal training on the job. Entry to this occupation may be improved if you have qualifications and you may like to consider a VET course. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a nail technician through a traineeship in Nail Technology, Beauty Services or Beauty Therapy. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Before selecting a course, check with potential employers to make sure the course meets their requirements. Employers are less likely to consider applicants who have completed a short course or have qualifications not recognised by the industry. Nail technicians with nationally accredited qualifications may work throughout Australia.

Local councils have specific requirements regarding the establishment and delivery of mobile or salon beauty services, including adhering to occupational health and safety regulations and state guidelines relating to skin penetration.

Employment Opportunities

Nail technicians work in nail salons or beauty salons alongside beauty therapists. Employment prospects in these salons may be improved if you have beauty therapy qualifications. Many nail technicians are self-employed and may visit clients' homes, work from mobile vans or work from home.

Related Jobs

Beauty Therapist (p 277); Hairdresser (p 299); Make-up Artist (p 106).

Nanny

Nannies care for children as employees in private households.

Nannies:

- care for babies or young children by feeding, washing and dressing them, as well as by supervising their play and learning activities
- plan creative play and learning activities and organise meal and sleep times
- develop and/or maintain appropriate routines
- communicate with parents to ensure their preferences regarding child care are maintained
- safeguard children against potential dangers, such as swimming pools, kitchen utensils, poisons and stairs
- take children to school, kindergarten and other activities
- plan and prepare nutritious snacks and meals for children and possibly the family
- care for and maintain children's belongings, bedrooms and play areas
- take sole charge of children for extended periods while parents are absent from home
- arrange and supervise outings
- apply first aid and take appropriate action in cases of accident or emergency
- perform light housekeeping duties when applicable, such as laundry or meal preparation.

Nannies employed full time may be required to live in their employers' homes. They may also be required to work in the evenings and on weekends.

Personal Requirements

- Patient and mature with a willingness to accept responsibility
- Good organisation skills
- Able to work with young children
- Able to work unsupervised
- Good communication skills
- Reliable
- Able to multi-task
- Flexible and resourceful

Education and Training

You can work as a nanny without formal qualifications, but employers usually require Year 10. Entry to this occupation may be improved if you have qualifications and you may like to consider a VET course. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a nanny through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

To work as a nanny you must obtain a National Police Certificate, a Provide First Aid Certificate and a Working with Children Check. You will also need extremely good references.

Employment Opportunities

Employers and agencies have a strong preference for applicants with recognised qualifications and references. Opportunities for qualified Australian nannies are available overseas, especially in the United Kingdom, Europe, the USA and Canada.

Related Jobs

Early Childhood Educator (p 122); Youth Worker (p 251).

Non-destructive Testing Technician

Non-destructive testing technicians examine and test the functionality and performance of an object or material in a way that will not affect its usefulness.

Non-destructive testing (NDT) technicians:

- test welds in the manufacture of pressure vessels and other steel fabrications
- test power generation and petrochemical plant components for corrosion and other defects
- test aircraft structures, engines and components for in-service and other defects
- examine and interpret inspection methods and test results for other personnel
- apply various methods in laboratory situations or at construction sites to investigate the properties of materials, objects and instruments.

NDT work is often done in the field, such as on pipelines or at construction sites. It is also used frequently in production plants and laboratories as part of a quality system.

Persons engaged in X-ray work may be exposed to ionising radiation in the course of their duties. Each state and territory has legislation and codes of practice for how this work is to be carried out safely.

Personal Requirements

- Enjoy technical and engineering activities
- Attention to detail
- Able to work independently or as part of a team
- Good analytical skills and problem-solving ability
- Enjoy mathematics and science
- Good vision
- Willing to follow instructions and procedures
- Good communication skills

Painter and Decorator

Painters and decorators apply paint, varnish, wallpaper and other finishes to protect, maintain and decorate interior and exterior surfaces of domestic, commercial and industrial buildings and other structures. Painters and decorators may concentrate on a specific area of work, such as the internal or external painting of domestic homes, commercial buildings, industrial structures and equipment. They may also concentrate exclusively on restoration work.

Painters and decorators:

- determine the quantity of materials needed for the job by taking surface measurements or by looking at job specifications or drawings
- remove old paint or paper using sanders, scrapers, heat guns, liquid paint removers and steam strippers as appropriate
- prepare surfaces by fixing woodwork; filling or sealing holes, cracks and joints; and washing them down using high pressure wash systems to remove dust and grease
- select and prepare paints to match colours by adding tinters
- brush, roll or spray paints, stains, varnishes and other finishes
- when wallpapering, set out the area according to the pattern match and starting point in the room, cut the paper to the appropriate length, apply paste to the back of each strip and hang the paper on the wall, smoothing out any wrinkles or bubbles
- spray paint surfaces using a spray gun or specialised equipment
- apply decorative paint finishes such as stencils, colour glaze, graining, marbling and lettering, gold leaf and texture finishes
- wash equipment and clean work areas.

Due to occupational health and safety laws, most painters work from elevated work platforms or built-up scaffolds erected by qualified personnel. They have to do a lot of bending and stretching.

Personal Requirements

- Able to cope with the physical demands of the job
- Able to work at heights
- Enjoy practical work
- Good hand-eye coordination
- Normal colour vision
- Good sense of balance
- Able to work independently or as part of a team

Education and Training

To become a painter and decorator you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Painters and decorators are usually employed by painting and decorating contracting firms, or are self-employed contractors. Some work for government agencies concerned with public works, housing and railways. Advancement to supervisory positions, technical training or sales work is possible.

Opportunities for painters mainly depend on the level of building and renovation activity.

Related Jobs

Wall and Ceiling Liner (p 331).

Panel Beater

Panel beaters repair damage to metal, plastic and fibreglass bodywork on vehicles. They also make and form vehicle panels using machines or hand tools.

Panel beaters:

- remove damaged panels and components by unbolting or cutting them away
- repair damaged body panels with specialist tools and equipment
- use measuring, mechanical and hydraulic equipment to restore vehicles to factory clearances
- cut and join replacement sections or damaged panels using correct welding procedures

- repair dents with plastic fillers, and file, grind and sand repaired surfaces using power and hand tools
- fit the repaired panels on the framework of the vehicle and refit body hardware, such as door locks and door trims
- replace badly damaged sections with new or second-hand panels
- realign chassis and body frames using chassis aligners and measuring systems
- remove and replace accident-related mechanical items
- remove and replace auto-electric components
- help vehicle body builders to build custom-designed, speciality or vintage vehicles
- assist with spray painting vehicles.

Panel beaters work in workshops and wear protective clothing.

Personal Requirements

- Enjoy practical and manual activities
- Able to work with hand tools and machines
- Good hand-eye coordination
- Able to visualise the end product
- Aptitude for technical activities

Education and Training

To become a panel beater you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Panel beaters mainly work for crash repairers, new and used car dealers and motor vehicle manufacturers. A few work for motor body builders on the construction of new bodywork. Panel beaters may progress to supervisory and management positions, especially in larger organisations. They may also establish their own motor vehicle repair businesses. Others may move across from panel beating to related occupations such as vehicle painting and welding. Some become loss assessors in insurance companies or take up sales positions in industrial machinery and equipment.

Employment opportunities depend on the number of cars on the road, the number of accidents and technological change, especially in vehicle body structures and materials.

Related Jobs

Tyre Fitter and Repairer (p 330); Vehicle Painter (p 331).

Pest and Weed Controller

Also known as Fumigator and Pest Management Technician

Pest and weed controllers kill or control plants, animals and insects that are considered troublesome or harmful to agricultural, industrial or domestic activities.

Pest and weed controllers:

- inspect properties, identify problems, determine treatments and provide estimates of costs at the request of landowners or government authorities
- advise on preventative measures
- apply appropriate pesticides (including sprays, gels, dusts, baits and fumigants) to infested areas
- handle, mix and store chemicals following safety precautions and regulations set by manufacturers and government legislation
- operate generators, compressors, and manual and electric pumps to inject or spray liquid and gaseous pesticides and herbicides
- take care to minimise damage to other plants, animals and the environment
- carry out simple maintenance practices to prevent pests entering buildings, such as bird-proofing roofs, and filling cracks and crevices
- maintain equipment in safe, efficient working order
- maintain work records of each property inspected, the pest or weed problem, chemicals used and the amount of time spent at each location
- write reports for clients.

Pest and weed controllers have a lot of contact with chemicals and wear protective clothing such as overalls, gloves and masks. Pest controllers work both inside and outside and are sometimes required to work in cramped conditions, such as under houses or in attics. Weed controllers usually work outside. Pest and weed controllers usually have a lot of contact with clients.

Personal Requirements

- Good communication and customer service skills
- Able to work independently and solve problems
- Free from breathing problems and related conditions
- No known allergies to the chemicals used
- Safety-conscious
- Able to make accurate observations and calculations
- Responsible attitude

Education and Training

You can work as a pest and weed controller without formal qualifications, but you will need to obtain a special licence, which requires some study. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications and you may like to consider a VET course. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a pest and weed controller through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Pest and weed control is largely seasonal work, with high demand for experienced staff in the summer months and less demand in winter. Controllers may work for large pest control companies servicing a wide geographical area, or they may be self-employed, operating in a relatively small area or specialising in a particular type of control. Demand may also be affected by the level of housing construction as new houses are required by law to be treated.

Related Jobs

Agricultural Technical Officer (p 28); Forester (p 34); Natural Resource Manager (p 37); Park Ranger (p 158).

Plumber

Plumbers lay out, install, test and maintain pipes, fixtures, metal roofing, fittings, gas meters and regulators.

Plumbers:

- prepare and/or study plans and specifications to determine the layout of plumbing systems and materials needed

- find and mark positions for connections, measure pipes and mark cutting or bending lines, then cut holes through walls and floors to accommodate pipes
- cut, thread and bend pipes, assemble and install piping, valves and fittings, and join pipe sections and secure pipes
- test lines as required by local plumbing regulations
- install equipment such as boilers, chillers, pumps, heating and cooling systems, gas appliances, water tanks, water heaters and solar water heating systems, and fixtures such as toilets, wash basins and industrial processing units
- weld and braise pipework (steel, copper, plastic and stainless steel)
- system testing and commissioning
- maintain and repair plumbing systems.

Personal Requirements

- Enjoy practical work
- Good hand-eye coordination
- Able to work independently
- Able to work at heights and in various weather conditions
- Able to cope with the physical demands of the job
- Good interpersonal skills
- Good mobility

Education and Training

To become a plumber you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Plumbers must apply for registration and licensing with the relevant body in their state or territory. Post-trade qualifications from the Construction, Plumbing and Services Training Package may be required to fulfil registration requirements for more specialised areas of work, such as gasfitting, draining, hydraulics and fire protection. Workers in the construction industry must undergo safety induction training and be issued with a Construction Induction Card (CIC).

Employment Opportunities

The industry is dominated by small firms and self-employed tradespeople. Plumbers may also work for federal or state and territory government departments concerned with public works. Plumbers are involved in everything from domestic maintenance to high-rise construction.

Competition is strong for available apprenticeship positions. With further training and experience, plumbers can become technical and sales representatives, building supervisors, building and construction managers, plumbing inspectors, hydraulics consultants, technical teachers, estimators, building contract administrators or purchasing officers, or start their own business.

Demand is linked with activity in the construction industry. However, unlike in other building trades, downturns in building activity have less effect on plumbers because of the work available in renovation and maintenance. Demand is also more stable because, by law, certain jobs must be performed by plumbers.

Related Jobs

Army Trades (p 153); Carpenter (p 282); Refrigeration and Air Conditioning Draftsperson (p 315); Roofer (p 317).

Primary Products Inspector

Also known as Quarantine Inspector and Food Standards Officer

Primary products inspectors examine animals, plants and agricultural produce at farms, abattoirs, processing and packing plants, wholesale markets and places of storage or shipment to ensure they meet government standards of hygiene and quality, and export requirements.

Primary products inspectors:

- check produce, live animals and crops for disease, insect or chemical residue and other damage, and reject those of substandard quality
- check and grade produce (such as meat, fruit, vegetables, milk, grains, sugar cane and fish) during processing, ensuring ingredients used in processing meet government standards of purity and grading
- supervise fumigation of ships and aircraft
- supervise the proper disposal of quarantine garbage
- examine imported plants, animals and products (timber, seeds and dried fruits, for example) and make quarantine arrangements
- ensure commercial fishing regulations are obeyed
- inspect livestock before and after slaughter to check that they are fit for human consumption
- advise on packing and loading regulations
- advise primary producers on economic aspects of disease eradication, and inform producers and the general public of health implications of diseases and impurities
- appear in court to give evidence in cases involving breaches of the regulations.

Primary products inspectors may be required to work shifts, including weekends.

Personal Requirements

- Normal colour vision
- Confidence when dealing with people
- Good communication skills
- Able to make accurate observations
- Good organisational and supervisory skills
- Able to handle animals with confidence and patience
- Aptitude for working with computers

Education and Training

To become a primary products inspector you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact our chosen institution for further information.

You can also become a primary products inspector through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

To become a quarantine inspector you must first become an employee of the Department of Agriculture. Once employed, you will be required to participate in on-the-job training. Quarantine inspectors are employed at airports and seaports throughout Australia. Meat inspectors usually work at establishments that slaughter or process meat for export or domestic consumption.

Employment opportunities for sugarcane analysts/auditors are mainly in Queensland, with limited opportunities in NSW and WA. Sugarcane analysts/auditors work in laboratories located within sugar mills, and most work rostered shifts.

Related Jobs

Agricultural Scientist (p 28); Beekeeper (p 29); Butcher (p 257); Fisheries Officer (p 33); Food Technician (p 236); Food Technologist (p 237); Forester (p 34); Natural Resource Manager (p 37); Quality Assurance Inspector (p 314); Shearer (p 37); Veterinarian (p 337).

Process Plant Operator (Oil and Gas)

Process plant operators in the oil and gas industry control, monitor and maintain the plant machinery and equipment to produce, refine and pump chemicals, oil, gas and petroleum.

Process plant operators in the oil and gas industry:

- operate pumping equipment to transfer oil and gas from wellheads to refineries, within refineries or to storage facilities
- control the flow of oil and gas through pipelines
- operate and control equipment to process, manufacture or blend refined oil products, gas and additives into petroleum and gas products, such as LPG, fuels and lubricants
- set controls through local and computer controlled systems, and observe gauges and instruments on equipment
- prepare equipment to enable access for maintenance crews
- collect, process and analyse samples and record data
- monitor equipment performance for malfunctions, test well pipes for leaks and fractures and request maintenance activities when required.

Most refineries and processing plants use sophisticated computers to control the equipment and processes. Knowledge of chemical and mechanical processes and equipment performance is very important in order to safely optimise production quantity and quality. Process plant operators usually work in remote locations, possibly on a fly-in, fly-out basis, usually flying from a base location to the worksite, where they work for a number of weeks and then return to the base location. Shiftwork may be required. Process plant operators work in physically challenging environments, with heavy machinery and potentially hazardous chemicals. Strict safety procedures and regulations must be followed to minimise the risk. There is zero tolerance for drugs and alcohol at these worksites and workers may be required to submit to regular testing.

Personal Requirements

- Mechanical aptitude
- Able to work as part of a team
- Good written and verbal communication skills
- Able to cope with the physical demands of the job
- Safety-conscious
- Good mathematical skills
- Technical, problem-solving and analytical skills
- An aptitude for working with computers and learning and using new technologies
- Good hand-eye coordination

Education and Training

To become a process plant operator you usually have to complete a traineeship. Entry requirements may vary, but employers generally require Year 12.

Employment Opportunities

Process plant operators are employed in onshore and offshore oil and gas production and processing plants, as well as in oil refineries, chemical plants and oil storage facilities (terminals). The increase in global energy demands for petroleum and gas has led to the expansion of activity in this area, with growth in skilled employment in conventional and unconventional gas fields.

Related Jobs

Chemical Engineer (p 137); Chemical Plant Operator (p 283); Engineering Tradesperson - Fabrication (p 293); Engineering Tradesperson - Mechanical (p 293); Instrument Fitter (p 300); Instrumentation Tradesperson (p 301); Machine Operator (Non-metal Products) (p 305).

Product Assembler

Product assemblers put together components and subassemblies that go into the production of metal products, electrical and electronic equipment, joinery products, jewellery and precious metal articles.

Product assemblers:

- locate, position and secure components on workbenches
- punch and drill mounting holes in parts and assembled products
- assemble and secure components in sequence
- assemble parts by nailing, screwing, gluing and pinning, riveting, soldering and spot welding components
- fit hardware items, such as hinges, catches and knobs, to parts
- attach and fasten jewellery parts to fabricate bracelets, necklaces, brooches and earrings
- remove raised edges and finish items using files, grinding wheels and emery paper
- check products to identify and reject defective items
- work under instruction from leading hands or supervisors
- pack products into boxes and stack onto pallets
- operate automatic and semi-automatic machinery and tools, such as conveyor belts, bottling machines or soldering irons
- manually wind light electrical field coils.

Product assemblers work in factories and workshops usually under close supervision. Working conditions can be noisy and they may be required to stand for long periods while performing repetitive work. Factories will often rotate their staff so that they are not doing the same task for too long and so that staff are multiskilled across production operations.

Personal Requirements

- Enjoy practical and manual activities
- Careful and patient
- Good eyesight (may be corrected)
- Good hand-eye coordination
- Able to carry out repetitive tasks quickly and methodically
- Able to work as part of a team
- Able to read and follow instructions
- Safety-conscious

Education and Training

You can work as a product assembler without formal qualifications. You will probably get some informal training on the job. You can also become a product assembler through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Product assemblers are employed by a wide range of manufacturing and processing companies in metropolitan areas and larger country towns.

Related Jobs

Engineering Tradesperson - Fabrication (p 293); Engineering Tradesperson - Mechanical (p 293); Locksmith (p 304); Tool and Die Setter (p 326).

Quality Assurance Inspector

Also known as Quality Control Officer and Weights and Measures Inspector

Quality assurance inspectors examine manufactured products, primary produce, goods and services to make sure they meet all standards of presentation and quality. With experience and sometimes further training, it may be possible to become a quality assurance manager, who has responsibility for all quality systems within an organisation.

Quality assurance inspectors:

- study product and/or service specifications
- sample products or services to determine whether they meet specifications and quality standards, and initiate corrective action if necessary
- analyse quality assurance data and make recommendations for improvement
- train and assist operators to carry out their quality control functions
- check details of assemblies
- compile reports.

Quality assurance inspectors are required to communicate with production workers, production managers and suppliers and work together to develop systems that promote quality.

Personal Requirements

- Enjoy clerical and administrative work
- Good oral and written communication skills
- Able to work independently or as part of a team
- Eye for detail
- Able to analyse and solve problems
- Conscious of safety and the environment

Education and Training

You can work as a quality assurance inspector without formal qualifications. You will probably get some informal training on the job.

Entry into this occupation may be improved if you have qualifications and you may like to consider a VET course. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Employment Opportunities

Quality assurance inspectors work in all sectors of the economy, but especially in the manufacturing and processing industries. They are usually experienced workers who have worked their way up through the company. Many private organisations and government departments have developed or are developing formal quality assurance and continuous improvement programs. There is a growing trend with employers seeking graduates who can coordinate quality systems rather than simply carry out quality assurance inspection.

Related Jobs

Civil Engineer (p 138); Environmental Health Officer (p 30); Food Technologist (p 237); Laboratory Worker (p 240); Mechanical Engineer (p 143); Occupational Health and Safety Officer (p 178); Primary Products Inspector (p 312).

Radio Dispatcher

Also known as Control Room Operator

Radio dispatchers provide radio and communications services for the coordination of operational units in transport, courier, emergency, military, security, rescue and road service organisations.

Radio dispatchers:

- receive and relay radio or telecommunications messages from operational units, customers, the public or organisations such as the police, ambulance and fire services
- coordinate radio or network communications between operational units
- record critical information from emergency, routine and administrative calls
- relay information to enable mobilisation of appropriate resources and personnel
- start and maintain communications during emergency situations and guide callers until emergency services arrive at the scene
- prepare accurate and detailed reports of communications traffic
- coordinate the movements of mobile units.

In some states and territories, radio dispatchers who work in the emergency services sector (police, fire and ambulance) may be required to be uniformed officers, and therefore must meet the selection criteria for that occupation.

Personal Requirements

- Good communication skills
- Able to think clearly and act quickly
- Able to stay calm in difficult situations
- Able to multitask
- Aptitude for technical activities

Education and Training

You can work as a radio dispatcher without formal qualifications, but employers usually require Year 10. You will probably get some informal training on the job. You may also need to meet typing requirements, including words per minute and accuracy.

Additional Information

To work as a civilian radio dispatcher in the emergency services, you will need to have Australian citizenship or permanent residency status, hold a current Provide First Aid Certificate, pass medical and psychological assessments, and undergo a National Police Check.

Employment Opportunities

Radio dispatchers are employed on a full-time, part-time or casual basis, and may be required to do shift and weekend work. Radio dispatchers who have undertaken appropriate training or who have suitable experience are highly regarded and sought after by employers.

Related Jobs

Paramedic (p 205).

Railway Infrastructure Worker

Railway infrastructure workers work on the construction, maintenance and operation of railway infrastructure, including tracks, signalling equipment and buildings.

Railway infrastructure workers:

- inspect and monitor railway tracks
- check, assess and maintain track-laying equipment
- install, maintain and repair tracks, sleepers (wooden or concrete support slats) and ballast (crushed stone surrounding the tracks and sleepers)
- operate equipment
- perform general site maintenance of the rail corridor.

Railway infrastructure workers work on railway lines and at transfer yards, mines and quarries. They work shifts, including weekends and public holidays. Those working in regional or remote locations may be required to stay in local accommodation.

Personal Requirements

- Enjoy practical and manual activities
- Able to cope with the physical demands of the job
- Alert and safety-conscious
- Able to work as part of a team

Education and Training

You can work as a railway infrastructure worker without formal qualifications, but employers usually require Year 10. Once you are employed, you will receive formal training, both on and off the job. On completion of this training, you may receive a nationally recognised qualification.

Additional Information

Applicants go through a range of recruitment processes, including personality, aptitude and ability tests; an interview; and a medical assessment. Age limits may apply.

Employment Opportunities

Railway infrastructure workers may be employed throughout Australia, by state passenger services, the national railway asset owner, Australian Rail Track Corporation (ARTC) (www.artc.com.au), and by contractors providing infrastructure services to these operators.

Demand for railway infrastructure workers depends on the levels of railway construction and maintenance activity. Employment opportunities may increase with previous relevant experience. With experience and further training, promotion to supervisory or other positions is possible.

Related Jobs

Train Driver (p 328); Train and Network Controller (p 327).

Refrigeration and Air Conditioning Draftsperson

Refrigeration and air conditioning draftspersons design and produce working drawings of mechanical systems for refrigeration and air conditioning systems within a building project so that they can be manufactured, constructed and installed.

Refrigeration and air conditioning draftspersons:

- design and produce relevant working drawings
- liaise with equipment suppliers, site personnel and project managers
- coordinate with other service contractors involved in the project and production of accurate drawings
- site measuring
- attend site meetings.

Refrigeration and air conditioning draftspersons work predominantly in the computer-aided design (CAD) environment and often work closely with professional engineers and tradespeople.

Personal Requirements

- Enjoy technical and design activities
- Aptitude for problem-solving
- Good communication skills
- Able to work as part of a team
- Willing to accept responsibility and supervise other people
- Normal colour vision

Education and Training

To become a refrigeration and air conditioning draftsperson you usually have to complete a VET qualification. Entry to these courses may require employment in a mechanical services drafting office. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Employment Opportunities

Refrigeration and air conditioning draftspersons are employed mainly by mechanical contracting companies, government agencies and installation, service-maintenance and manufacturing firms. The growing awareness of energy efficiency has led to an increase in the demand for systems that maximise performance and energy efficiency but are easy to build and maintain.

Related Jobs

Mechanical Engineering Associate (p 144); Refrigeration and Air Conditioning Mechanic (p 316).

Refrigeration and Air Conditioning Mechanic

Refrigeration and air conditioning mechanics select components, assemble, install, test, fault-find, service and repair industrial, commercial and domestic refrigeration and air conditioning systems in homes, shops, factories, office buildings, hospitals, supermarkets and cold stores.

Refrigeration and air conditioning mechanics:

- follow plans and specifications to install, commission, service and maintain equipment
- drill holes, install mounting brackets and cut, bend and join piping
- install parts such as compressors, motors, condensers, evaporators, air filters, switches, controls and gauges
- install and connect piping to refrigeration systems
- check that parts are installed, lined up and fit properly
- test systems for leaks and then fill them with refrigerant according to relevant standards and regulations
- test refrigeration and air handling units and make adjustments to ensure they work correctly
- use computers to monitor systems and remotely adjust the operation of all equipment in a given building.

When carrying out installation work, refrigeration and air conditioning mechanics may work on large commercial and industrial units that have to be installed part by part, or pre-assembled units that simply require installation. Domestic units may come already assembled or in two sections between which refrigerant piping must be installed. Refrigeration and air conditioning mechanics may need to be skilled in pipefitting, welding and electrical wiring. They may have to work extended hours to fix breakdowns and carry out emergency repairs. They may work alone or with associated tradespeople such as electricians, pipe fitters and carpenters.

Personal Requirements

- Able to work with hand and power tools
- Enjoy and have an aptitude for technical work
- Able to work patiently, systematically and thoroughly
- Normal colour vision
- Able to work as part of a team
- Good communication skills

Education and Training

To become a refrigeration and air conditioning mechanic you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Refrigeration and air conditioning mechanics are employed mainly by installation, service maintenance and manufacturing firms that service shops, hotels, factories, offices and hospitals. Some refrigeration and air conditioning mechanics work for firms that specialise in cold storage, food treatment plants and refrigeration on ships. With experience, and sometimes further training, promotion is possible to supervisory, sales, technician, associate, technologist or engineer positions. Some refrigeration and air conditioning mechanics are self-employed. Opportunities for refrigeration and air conditioning mechanics are affected by the level of building and refurbishment activity, especially in the commercial and industrial sectors.

Related Jobs

Electrician (p 291).

Rigger

Riggers assemble and install rigging gear such as cables, ropes, pulleys and winches to lift, lower, move or position machinery, structural steel and other heavy objects.

Riggers:

- examine objects to be moved, estimate their size, shape and weight and decide on the type of equipment necessary to move them
- erect a temporary jib or derrick (lifting devices) if required, and install cables, pulleys and other tackle
- choose or make slinging equipment and attach it to the load
- erect cranes and mobile crane booms, and increase the height of tower cranes by bolting component parts in place and rigging cables
- splice ropes and cables to make slings and tackle
- erect structural steel for buildings or plants under construction
- erect precast concrete panels used on facades of buildings
- inspect, maintain and repair equipment
- make sure that safety requirements are met at all times.

Riggers mainly work outdoors on construction sites, but can also work on ships, in factories and mines, and in the entertainment industry completing tasks such as setting up stages.

Personal Requirements

- Enjoy practical outdoor work
- Able to cope with the physical demands of the job
- Able to work at heights
- Good with hands
- Safety-conscious
- Able to work as part of a team

Education and Training

To become a rigger you usually have to obtain a licence to perform high risk work. To gain a licence, you will need to complete units of competency at an approved Registered Training Organisation and work under the supervision of a licensed operator. You will also need to keep an approved logbook to record competencies achieved during training. Assessment by an accredited assessor will then be required. The High Risk Work Licence is issued under the National Standard for Licensing Persons Performing High Risk Work.

You can also become a rigger through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

You must be 18 years of age to be eligible to obtain a High Risk Work Licence. However, training may commence at a younger age. All those who work in the construction industry must undergo safety induction training and be issued with a Construction Induction Card (CIC).

Employment Opportunities

Riggers are usually employed by building and construction firms, building industry subcontractors and contract-labour hire firms. Mobility between associated occupations such as crane driver and scaffolder is possible, provided the relevant licence to Perform High Risk Work is obtained. Due to the greater earnings available, some riggers undertake crane driving during periods of high building activity.

Related Jobs

Construction Worker (p 286); Crane Operator (p 287); Waterside Worker (p 332).

Roofer

Roofers cover houses and other structures with roof tiles, slates, shingles or steel sheeting to form waterproof and durable surfaces.

Roofers:

- examine drawings, specifications and worksites to determine materials required
- assess risks
- erect ladders and tile elevators
- erect and dismantle restricted-height scaffolding
- place roofing underlays over eaves and secure them by nailing or stapling these to roofs
- correctly space and nail wooden strips (battens) across the roof rafters on which the tiles or other roofing material will be placed
- measure and cut roofing material to fit around vents, chimney edges and the hips and valleys of the roof
- fix roof flashings (weatherproof covering)
- fix the ridge caps and gable ends with cement mortar or tech screws
- apply protective paint coating systems
- clear the roof of debris after job completion.

Roofers' work involves a lot of bending, climbing and lifting. They work outdoors, at heights and in all weather conditions.

Roofers may specialise in tiling or installing new roofs, repairing existing roofs or removing old roofs and replacing them. Roofing may be divided into the following categories:

- Roof Tiler - works with clay tiles, stone slates or wooden shingles and overlaps the tiles in successive layers to form waterproof roofs.
- Metal Roof Plumber - works with metal, polycarbonate, fibreglass, glass malthoid sheets and waterproof membranes. Metal roof plumbers also install roof mesh, insulation, gutters and downpipes, rainwater tanks, equipment pumps and roof plumping systems.

Personal Requirements

- Enjoy practical and manual activities
- Good sense of balance
- Good hand-eye coordination
- Willing to work at heights and outdoors

Education and Training

To become a roofer you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

When working at heights, industry standards require roofers to complete a Work Safely at Heights short course provided by a Registered Training Organisation (RTO). All those who work in the construction industry must undergo safety induction training and be issued with a Construction Induction Card (CIC).

Employment Opportunities

Many roofers are self-employed or work for small companies that supply and fix roofs. They are usually subcontracted to roofing manufacturers on a semi-permanent basis. Roofers are also directly employed by manufacturing companies and by state, territory or local government bodies concerned with public works.

Related Jobs

Carpenter (p 282); Construction Worker (p 286); Plumber (p 311); Tiler - Wall and Floor (p 325).

Roofing Plumber

Roofing plumbers install downpipes, gutters, tanks and flashing in buildings and dwellings.

Roofing Plumbers:

- install roof drainage systems
- conduct repairs and maintenance on flashings and rainwater products
- analyse and interpret technical drawings
- install roof sheeting and wall cladding

Roofing plumbers work outdoors and on roofs which can vary in height. They generally begin work early in the morning and may travel often between job sites.

Personal Requirements

- Management and leadership skills
- Good planning and organisational skills
- Good communication and interpersonal skills
- Ability to problem solve
- Deadline-orientated

Education and Training

To become a roof plumber you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

For further details, visit gooduniversities.com.au.

Additional Information

When working at heights, industry standards require roofing plumbers to complete a Work Safely at Heights short course provided by a Registered Training Organisation (RTO). All those who work in the construction industry must undergo safety induction training and be issued with a Construction Induction Card (CIC).

Employment Opportunities

Many roofing plumbers are self-employed or work for small companies that supply and fix roofs. They are usually subcontracted to roofing manufacturers on a semi-permanent basis. Roofing plumbers are also directly employed by manufacturing companies and by state, territory or local government bodies concerned with public works.

Related Jobs

Roofer (p 317).

Rubber Processor

$1,294 Lower skill Decline

Rubber processors operate machines and perform related duties to manufacture rubber products such as tyres and reinforced hoses.

Rubber processors:

- select appropriate material for processing as per specification
- set controls and check the production machine before starting
- load raw materials
- operate machines in accordance with safety requirements
- mark out patterns from blueprints and cutting sheets
- monitor instruments and adjust controls to regulate the speed and temperature of rubber processing machines
- sandblast non-rubber surfaces
- remove wrinkles and trapped air in rolled products
- maintain consistent operation of output
- check the quality of products and take part in quality improvement activities
- report defects and carry out minor repairs
- keep production records and quality assurance data.

Rubber processors work in factories and may be required to work shifts. They may have to handle dirty items. In some factories the equipment is computer-controlled. The use of safety equipment and lifting devices to move heavy items is required in some areas.

Personal Requirements

- Enjoy practical and manual activities
- Good communication skills
- Enjoy working with figures
- Able to work neatly and accurately
- Good health and eyesight
- Good with numbers
- Safety-conscious
- No allergies to rubber compounds, powder and dust

Education and Training

You can work as a rubber processor without formal qualifications. You will probably get some informal training on the job.

You can also become a rubber processor through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Rubber processors are employed in factories and by tyre manufacturers. Some tyre distributors have tyre re-treading, recapping and repair facilities where rubber workers are also employed. A large proportion of the rubber industry is involved in the manufacture of component parts for motor vehicles. As new technologies and processes change the way companies operate, people with good practical and problem-solving skills are highly sought after.

Related Jobs

Chemical Plant Operator (p 283); Machine Operator (Non-metal Products) (p 305).

Security Officer

$1,318 Entry level Strong

Also known as Bouncer and Security Guard

Security officers protect people and property, and maintain crowd control.

Security officers:

- patrol areas and check doors, gates and windows for signs of unauthorised entry
- watch for irregularities (such as fire hazards, leaking water pipes, lights left on, equipment malfunctions, unlocked security doors) and report incidents or problems to the appropriate authority
- record times of inspections and presence of authorised persons
- respond to alarms and check alarm systems
- provide armed escort for payroll deliveries
- observe and report suspects to police, or apprehend offenders when appropriate and detain them until police arrive
- monitor computer alarm systems, closed-circuit television (CCTV) systems and communicate by radio with mobile units to attend alarms
- issue security passes, give directions and make security arrangements for authorised visitors
- check travellers and their hand luggage to detect concealed weapons and explosives
- detect and report fraud, shoplifting and other unlawful acts by employees or patrons of business establishments
- provide armed protection for specific organisations (banks, for example)
- provide assistance to the public and clients.

Security officers usually do shiftwork and may work at nights, on weekends and public holidays.

Specialisations

- Air Security Officer
- Protectives Service Officer
- Bodyguard
- Crowd Controller
- Gatekeeper

Personal Requirements

- Physically fit (may be required to pass a medical examination)
- Good hearing and eyesight (may be corrected)
- Observant
- Responsible and trustworthy
- Assertive with good interpersonal skills
- Good communication and negotiation skills
- Australian citizenship, or eligibility for citizenship, for Australian Protective Service Officer positions

Education and Training

To become a security officer you usually have to complete a VET qualification. Applicants may be required to undergo a pre-training National Police Check and/or attend an interview. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a security officer through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

On completion of this training, you can apply for a licence from the relevant body in your state or territory. You must be over 18 years of age, obtain a National Police Certificate and hold a current Provide First Aid Certificate. People involved in security work usually need a drivers licence.

Security officers working in licensed venues (where alcohol is served) will need a Responsible Service of Alcohol (RSA) certificate. RSA short courses are widely offered by TAFE institutes and Registered Training Organisations.

Employment Opportunities

The Australian Federal Police conducts recruitment for Protective Service Officers on an annual basis. Protective Service Officers undergo an intensive 13-week training course in Canberra. Applicants must be at least 18 years of age and hold a manual drivers licence.

Security officers are employed by private security firms, banks, large department stores, industrial and commercial organisations and property companies that own office blocks and hotels.

Security officers may be promoted to supervisory or managerial positions or to central control duties, checking that visits or patrols have been undertaken. Opportunities for promotion are generally better with larger organisations, although it is possible to move from a small employer to a more senior position with another firm.

Related Jobs

Security System Technician (p 319).

Security System Technician

Security system technicians fit and repair security systems in homes and businesses. Security system technicians work mainly indoors and sometimes have to work in confined roof spaces. They have considerable contact with customers in businesses and in private homes.

Security system technicians:

- inspect sites and talk to clients to determine security requirements
- provide estimates to clients for installation of equipment
- route cables through roof spaces, cavity walls and support structures and position and terminate cables, wires and strappings
- mount, position, calibrate, program and label all items of equipment
- test equipment and diagnose faults
- make connections to telephone lines for alarm monitoring
- maintain and adhere to operational procedures and complete appropriate documentation
- be responsible for assigned tools, plant and test equipment
- survey the workplace and complete a safety work method statement prior to commencement.

Security system technicians must develop a knowledge of the range of security equipment, including electronic and electrical surveillance systems and closed-circuit television (CCTV), as well as knowledge of simple electronic principles and terminating techniques. They must also understand the principles of operation and characteristics of controllers, detectors, relays, sirens, screamers and telephone circuits.

Personal Requirements

- Enjoy practical and manual activities
- Normal colour vision and eyesight (may be corrected)
- Good communication and interpersonal skills
- Aptitude for technical activities

Education and Training

To become a security system technician you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Security system technicians are employed by security system installation companies. There has been significant growth in this field in recent years, especially in home security. With experience, and sometimes further training, it is possible to become self-employed or the manager of a team of security system technicians.

Related Jobs

Electrician (p 291); Engineering Tradesperson - Mechanical (p 293); Security Officer (p 318).

Ship's Officer

Also known as Ship's Mate and Ship's Captain

Ship's officers navigate and supervise the safe operation of ships at sea, in port and at anchor. They coordinate the activities of the crew and control cargo stowage loading and unloading operations.

Ship's officers:

- liaise between the master and the crew of the ship
- keep watch from the bridge in watches (shifts)
- determine the position of the ship and other vessels and obstructions by using navigational aids
- supervise the work done by the crew
- provide medical and/or first aid treatment for the crew
- make sure safety regulations are observed
- perform designated safety and firefighting drills in emergency situations
- observe and record the ship's course and any alterations, the weather conditions and the ship's position in the daily logbook
- observe the ship's on-board security procedures and take part in security drills
- coordinate cargo loading and discharge operations and maintenance
- update charts and other nautical publications
- ensure that all necessary documentation has been completed.

Officers may be required to work or remain on duty for long periods. Generally they work in two watches of four hours on and eight hours off over a 24-hour period, depending on the type of ship they are working on. Other duties are performed during off watch periods.

Personal Requirements

- Willing to spend time at sea, away from home for long periods
- Pass a medical examination
- Pass an eyesight test and have normal colour vision
- Responsible and diligent
- Able to work as part of a team

Education and Training

To become a ship's officer you usually have to complete a four-year cadetship with a shipping company involving on-the-job training at sea and study at a Registered Training Organisation (RTO). To get into the cadetship, you will need to gain your Senior Secondary Certificate of Education with English, mathematics and physics.

You can also become a ship's officer by studying nautical science or marine engineering at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, physics and chemistry are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Those who do not sign on as a cadet may achieve the level of Watchkeeper (the basic requirement for a ship's officer) by obtaining employment as an integrated rating (sailor). This training must include experience at sea, as well as off-the-job training. This training can be provided by RTOs approved by the Australian Maritime Safety Authority (AMSA), including TAFEs. This method can take at least eight years because it requires private study outside working hours.

Once you have completed this training, you may be eligible to sit the AMSA Certificate of Competency test. You must be at least 18 years of age to gain a Certificate of Competency. You will also need to pass a medical examination. The AMSA Certificate of Competency is an internationally recognised qualification.

Employment Opportunities

There are opportunities for officers with Australian qualifications to work overseas. To do this you will need to have an internationally recognised qualification from AMSA. With experience and further study, there are opportunities for promotion to ship's captain/master.

Related Jobs

Deckhand (p 261); Marine Engineer (p 142); Marine Surveyor (p 305); Navy Officer (p 157).

Shipwright

Also known as Boatbuilder

Shipwrights construct, fit out, commission and repair all types of vessels from small pleasure craft through to a range of competitive, commercial and naval vessels. These vessels are built from a range of materials including metal, wood, aluminium, fibreglass, plastic, composites or ferro cement (reinforced cement or concrete).

Shipwrights:

- prepare preliminary sketches of structural parts and sections of vessels
- produce templates and patterns from full-size detail drawings
- fit out internal and external components of vessels
- position sections accurately prior to permanent fastening
- prepare slipways and construct cradles used to support ships during construction, transportation, launching and slipping
- supervise launching and slipping procedures
- carry out repairs.

Shipwrights work on the waterfront in shipyards, in the repair sections of ports or in small boat yards and marinas. They may also work for boat manufacturers in workshops away from the waterfront.

Personal Requirements

- Enjoy practical and manual activities
- Aptitude for technical activities
- Able to work at heights on scaffolding
- Able to cope with the physical demands of the job
- Good problem-solving skills
- Organised, methodical approach to work

Education and Training

To become a shipwright you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Shipwrights are employed in construction firms, the Australian Defence Force, companies building leisure craft, as surveyors, and in firms engaged in building and operating marinas. Opportunities for self-employment may also exist. Some of these businesses may operate on a mobile basis.

Related Jobs

Engineering Tradesperson - Fabrication (p 293); Engineering Tradesperson - Mechanical (p 293); Marine Surveyor (p 305); Vehicle Body Builder (p 331).

Shotfirer

Also known as Blaster

Shotfirers assemble, position and detonate explosives to break or dislodge rock and soil or to demolish structures.

Shotfirers:

- check blasting areas to make sure that safety regulations are met
- establish safe exclusion to control movement of personnel, livestock and vehicles around and on the blast area
- apply basic geology to assist in blast design, and interpret and apply blast design principals
- cut channels under working faces
- check bore-hole depths and ensure that they are clean
- calculate quantity of explosives required to achieve desired result
- insert detonators and charges into holes
- connect and test or inspect the blasting circuit
- fire charges
- inspect the area to make sure all explosives have been detonated
- manage explosives magazine stock control
- check site safety after blasting (falling rock hazards, underground mine roof supports and harmful fumes, for example), and declare the area safe.

Shotfirers may be required to work in remote areas and in conditions which may be dusty, hot and noisy. They may be required to work shifts.

Personal Requirements

- Enjoy practical and manual activities
- Willing to adhere to safety requirements
- Able to lead and supervise a team
- Able to accept responsibility
- Able to cope with the physical demands of the job
- Able to pass a medical examination
- Able to work in confined spaces, including underground
- Basic skills in mathematics and science

Education and Training

To become a shotfirer you usually have to obtain a licence for the appropriate class of work. Training, work experience and supervision requirements may vary depending on the type of work you wish to carry out (construction, mining or fireworks, for example).

Additional Information

To be eligible to obtain a licence to work with explosives, you must be at least 18 years of age and pass a National Police Check.

Employment Opportunities

Shotfirers are mainly employed by drilling and blasting contractors. Although mining companies, quarries, civil engineering and road construction firms require shotfirers, this role is often contracted out to specialist companies. Entry to this occupation may be improved if you have industry experience on a mine site.

Related Jobs

Miner (p 307).

Solid Plasterer

$1,600 Medium skill Strong

Also known as Cement Renderer

Solid plasterers apply decorative and protective coverings of plaster, cement or similar materials to the interiors and exteriors of buildings.

Solid plasterers:

- level and straighten corners, angles, and wall and ceiling surfaces
- clean and prepare surfaces by stapling wire-mesh frames to them, or by roughening them with mechanical hammers
- mix and apply coats of plaster, cement, render or similar materials to walls and ceilings, levelling and smoothing them using trowels
- apply finishing coats of plaster to give a smooth finish or decorative texture
- fix precast cornices and panel mouldings, ceiling centres and other plaster fittings
- render exterior walls and moulds
- finish the underside of concrete floors with a mixture of cement and granite chips or blue metal
- erect scaffolding (subject to licence requirements in some states or territories) and trestles.

Solid plasterers usually work in dusty conditions. They may work alone or in teams of two or three, both indoors and outdoors. They may have contact with the public.

Specialisations

- Wet Plasterer

Personal Requirements

- Enjoy practical work
- Good hand-eye coordination
- Able to work at heights
- Able to work neatly and accurately
- Good communication skills
- Some mathematical ability
- Able to read, interpret and work from plans
- Good health and stamina, and free from allergies to materials used

Education and Training

To become a solid plasterer, you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Solid plasterers may work for small businesses or government departments concerned with public works. Many solid plasterers are self-employed and after years of experience, start their own business.

Related Jobs

Builder (p 278).

Stonemason

$2,070 Medium skill Stable

Also known as Lettercutter and Stone Fixer

Stonemasons cut and shape hard and soft stone blocks and masonry slabs for the construction and renovation of stone structures and monumental masonry (stonework for cemeteries).

Stonemasons:

- cut and shape stone using machine or hand tools, taking into account the characteristics of the stone being used
- cut and polish granite and marble for use in construction, such as for kitchen bench tops and bathroom vanity units
- design, cut and carve monumental masonry, such as memorial tablets and bases for statues, using templates for detailed work and a variety of chisels, punches and hammers, depending on the type of stone being used
- cut lettering into stonework by marking out the letters and then cutting or chiselling them with hand-held tools or sandblasting equipment
- construct walls using stone slabs and large masonry slab blocks
- lay stone paving
- lay granite or marble floor tiles
- fix stone facades to buildings
- repair and replace stonework on old buildings, churches and monuments.

Stonemasons often work in a noisy environment.

Personal Requirements

- Enjoy practical work
- Able to cope with the physical demands of the job
- Able to work at heights
- Able to work with your hands
- Self-motivated
- Aptitude for technical drawing and working with computers is an advantage

Education and Training

To become a stonemason you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

In some states and territories, stonemasons must either be accredited as or work under the supervision of a registered building practitioner. All those who work in the construction industry must undergo safety induction training and be issued with a Construction Induction Card (CIC).

Employment Opportunities

Stonemasons are employed by construction companies to work on stone structures and by monument fabricators to make monuments and carve lettering. Some are self-employed. Stonemasonry is a small and specialised trade either focusing on the renovation and maintenance of old buildings or on monumental masonry. The use of masonry in construction has largely been superseded by modern techniques.

Demand is also affected by the number of restoration programs for old buildings and the trend for commercial stone facades, as well as stone and terrazzo furniture and components. The nature of a stonemason's job changes with the introduction of new techniques in cutting and forming stonework, requiring stonemasons to keep up to date with advanced equipment and the skills required to operate it.

Related Jobs

Bricklayer (p 278).

Storeperson

$1,052 | Lower skill | Stable

Storepersons receive, handle and dispatch goods coming into, or going out of, stores or warehouses.

Storepersons:

- unload goods and check them against order forms
- catalogue or label items with storage details
- place goods in bins and on racks, or stack bulky items on floors
- complete orders by selecting goods from shelves and checking them off appropriate lists
- package and send out completed orders to customers
- move heavy packages using forklift machinery
- obtain details of the location and quantity of items in stock, using visual display units or computers
- enter details of received delivery slips, requisitions and invoices into computers
- count and record the number of items in store during stocktake
- advise supervisor about stock and re-ordering levels
- help keep the work area neat and tidy.

Storepersons may also work as shelf-stackers who fill up shelves in stores and supermarkets. Storepersons may be required to lift or carry packages.

Personal Requirements

- Enjoy practical work
- Good eyesight (may be corrected)
- Able to cope with the physical demands of the job
- Good memory and organisational skills
- Safety-conscious

Education and Training

You can work as a storeperson without formal qualifications. You will probably get some informal training on the job. You can also become a storeperson through a traineeship in Warehousing Operations. Entry requirements may vary, but employers generally require Year 10. For more details, see Section 2. Ask your career adviser about the possibility of starting some of this training in school.

Additional Information

Storepersons are often required to operate a forklift, and may need to obtain a licence to Perform High Risk Work. For more information, refer to the separate entry for Forklift Operator.

Employment Opportunities

Demand for this occupation is widespread across most industries and in each state and territory. Major employers include manufacturers, container depots, food wholesalers and distributors, and resources companies. A move toward computerisation and automation has changed the nature of warehousing, storage and retrieval techniques, increasing the demand for workers with knowledge of appropriate operating systems and machinery.

Smaller enterprises often require workers to be multiskilled. They may handle the stores function, but also deal with trade or retail sales. Promotion to senior storeperson, sales clerk, stock clerk, sales representative or warehouse manager is possible with experience and further training.

Related Jobs

Airline Baggage and Freight Handler (p undefined); Forklift Operator (p 296); Inventory and Supply Officer (p 302); Logistics Clerk (p 304); Transport Clerk (p 329).

Swimming Pool and Spa Builder

$1,458 | Entry level | Strong

Swimming pool and spa builders install and construct in-ground and above-ground swimming pools and spas in both residential and commercial locations.

Swimming pool and spa builders:

- work with designers, architects, landscape architects and contractors to construct residential and commercial swimming pools or spas
- read and interpret building plans and specifications
- apply and finish sprayed concrete or fibreglass lining
- apply interior and waterproof surfaces
- install tiles and coping pavers
- install subsoil draining systems, filtration equipment and sanitisation systems
- install reticulation systems and pool plumbing
- prepare construction contracts.

Much of the work is done outdoors and involves driving to job locations.

Specialisations

- Swimming Pool and Spa Inspector

Personal Requirements

- Enjoy practical and outdoor work
- Able to cope with the physical demands of the job
- Able to work independently and as part of a team
- Able to follow precise directions

Education and Training

To become a swimming pool and spa builder you usually have to complete a VET qualification. Entry to these courses usually requires Year 10. You may be able to study through distance education.

You can also become a swimming pool and spa builder by completing a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

A drivers licence is usually required.

Employment Opportunities

Swimming pool and spa builders are employed in the property services, consumer affairs and environmental health industries.

Swimming Pool and Spa Technician

Swimming pool and spa technicians chemically treat pools and spas. They may also install, maintain and service pumps, filters, heaters and other related equipment.

Swimming pool and spa technicians:

- use chemicals in the treatment of water and the restoration of correct water balance for pools and spas
- maintain and repair all forms of swimming pool and spa equipment (such as pumps, filters, chlorinators, heaters and lights)
- provide customers with advice about solving problems with their equipment, water treatment or pool and spa maintenance
- work independently to maintain and service swimming pools and spas
- maintain inventory of stock in vans and ensure tools such as saws, pool cleaning equipment and measuring equipment is kept in good order
- communicate with customers to organise appointments, quotes and invoicing.

Much of the work is done outdoors and involves driving to job locations. In some cases, swimming pool and spa technicians may also be involved in the installation of pools and spas. see the separate entry for Swimming Pool and Spa Builder for more information.

Specialisations

- Swimming Pool and Spa Inspector

Personal Requirements

- Enjoy practical and outdoor work
- Able to cope with the physical demands of the job
- Able to work independently or as part of a team
- Strong customer service skills
- Able to follow precise directions

Education and Training

To become a swimming pool and spa technician, you usually have to complete a VET qualification. You will probably get some informal training on the job. Entry to these courses usually requires Year 10. You may be able to study through distance education.

Employment Opportunities

Swimming pool and spa technicians work in retail shops and as mobile service people. They are required to drive to households, unit or townhouse complexes, council pools, hospitals, schools, hotels or motels to service swimming pools or spas. With experience or further training, swimming pool and spa technicians may take on management responsibilities.

Taxidermist

Taxidermists prepare skins of birds, mammals, reptiles and fish to create life-like 3-D representations for display in museums, or as trophies and memorials. The skin (including fur, feathers or scales) is removed from the specimen, preserved using various methods, and mounted on an artificial frame. Taxidermists in museums also prepare specimens for study, research and collection purposes. They may employ the technique of skeletal assembly to demonstrate the structural and anatomical features of a specimen.

Taxidermists:

- take measurements and note features of specimens before mounting
- reproduce specimens by moulding and casting with a variety of materials including plaster, polymers, plastic, fibreglass and polyurethane foam
- remove and clean skin and treat with preservatives
- place skin on a model to reproduce the exact size and shape of the specimen
- preserve and prepare skeletons through the use of chemical and non-chemical treatment
- pose small animals and preserve them by freeze-drying
- prepare native and non-native animals for special exhibits
- prepare and preserve biological material for museum displays
- collect and preserve foreground material (plant, soil and leaf litter) for creating natural environments for diorama displays
- maintain exhibits and specimens.

Taxidermists may be employed by museums as preparators or exhibition project officers, who also create museum exhibits, including models and habitat displays.

Personal Requirements

- Enjoy natural history and animal anatomy
- Artistic interests such as sculpture, painting and drawing
- Good observation skills
- Good dexterity with tools and equipment
- Woodworking or carpentry skills
- Patient and careful
- Attention to detail

Education and Training

You can work as a taxidermist without formal qualifications. You will probably get some informal training on the job in taxidermy studios. Entry requirements may vary, but employers generally require Year 10.

Additional Information

In some states and territories, taxidermists may be required to hold a licence, depending on the type of work they are undertaking.

Employment Opportunities

Taxidermists are employed in government departments, the Commonwealth Scientific and Industrial Research Organisation (CSIRO), museums, universities and smaller private commercial studios. Employment opportunities are very limited within Australia, as most museums only have one position for taxidermists. Greater opportunities may exist overseas in countries that have game animals.

Related Jobs

Artist (p 95); Model Maker (p 107); Museum Curator (p 189).

Telecommunications Technician

$1,656 | Medium skill | Decline

Telecommunications technicians install, maintain and repair telecommunications and broadcasting networks and equipment.

Telecommunications technicians:

- install fixed and wireless network equipment and set up new telecommunications services
- ensure that equipment and circuit installations are of good quality
- place or terminate cables, including those made of optical fibre
- undertake proof tests such as line testing, circuit commissioning and power tests
- assemble, erect, position and label items of equipment
- provide cost estimates to customers for installation of equipment
- install and maintain telecommunication and other data systems at customers' premises
- install, test and maintain all types of telecommunications, switching and transmission equipment
- set up computer hardware and install and customise software applications used in telecommunications
- carry out modifications to items of equipment
- analyse system faults with a high degree of diagnostic skill (to circuit board level)
- maintain and adhere to operational procedures and complete appropriate documentation
- take responsibility for tools, and plant and test equipment
- develop and maintain good relations with internal and external customers
- operate call tracing facilities when necessary.

Telecommunications technicians work indoors and outdoors, and have considerable contact with customers in business or in private homes.

With the growth of digital telephony, particularly with business clients, the role of telecommunications technicians is increasingly becoming involved in the installation, customisation and troubleshooting of the computer software systems that drive modern telephone and data systems.

Personal Requirements

- Enjoy technical and engineering activities
- Able to perform routine repetitive tasks as well as non-routine or highly analytical tasks
- Able to show initiative
- Good with hands
- Normal colour vision
- Able to work at heights and in confined spaces
- Good customer service skills
- Able to work independently and as part of a team
- Prepared to undertake continuous training and development

Education and Training

To become a telecommunications technician you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Telecommunications technicians are employed by a variety of small, medium and large enterprises. These include large telecommunications carriers such as Telstra, Optus and Vodafone, network and exchange equipment suppliers, customer premises equipment suppliers and installation/maintenance service providers. Some are employed by the Australian Defence Force as specialised Army Telecommunications Technicians to help install and maintain high-tech military communications equipment.

Demand for telecommunications technicians depends on the need for installation and maintenance of network equipment.

Related Jobs

Cable Jointer (p 281); Data and Telecommunications Cable Worker (p 287); Electrical Linesperson (p 290); Electrician (p 291); Telecommunications Engineer (p 148).

Textile Mechanic

$2,062 | Medium skill | Stable

Textile mechanics set up, adjust and maintain machines used in the textile, clothing and footwear industries.

Textile mechanics:

- use tools and instruments to set up machines
- start machines for trial runs to ensure they are running properly
- diagnose and fix processing faults on textile equipment
- inspect yarns and fabrics produced

- repair or replace faulty parts
- organise the smooth running of shifts and prevent problems from occurring
- adjust machine settings to meet design specifications.

Textile mechanics usually work shifts.

Personal Requirements

- Enjoy practical and manual activities
- Good eyesight (may be corrected) and normal colour vision
- Mechanical aptitude
- Good hand-eye coordination
- Able to work quickly to locate and fix problems
- Good communication skills

Education and Training

To become a textile mechanic you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Textile mechanics are employed by weaving mills and manufacturers of clothing, knitted products, textiles, footwear and carpet. The nature of a textile mechanic's job is changing with the introduction of computerised machinery. With experience, and sometimes further training, textile mechanics may progress to technician, supervisory or quality control positions.

Related Jobs

Engineering Tradesperson - Mechanical (p 293); Footwear Worker (p 296); Instrument Fitter (p 300).

Tiler – Wall and Floor

$1,330 | Medium skill | Stable

Also known as Floor Tiler

Wall and floor tilers lay ceramic, clay, slate, marble, glass and other types of tiles on external and internal walls and floors to provide protective and decorative finishes.

Wall and floor tilers:

- look at plans, measure and mark surfaces to be covered and lay out work
- prepare wall and floor surfaces by removing old tiles, grout, cement and adhesive
- use tile-cutting tools to cut and shape tiles needed for edges, corners, or around obstacles such as fittings and pipes
- attach tiles to surfaces, using correct adhesive, making sure that patterned tiles match
- space and even the tiles by using tools such as spirit levels, squares and plumb-lines
- prepare and apply grout, remove excess grout, clean and polish tiles
- lay floors of cement, granolithic, terrazzo or similar composition
- apply waterproofing systems.

Wall and floor tilers sometimes work in confined areas where bending and kneeling is required. They lift and carry cement and stacks of tiles. They sometimes work at heights using ladders or scaffolding. Most tilers work in small teams and move frequently from one job location to another.

Personal Requirements

- Enjoy practical and manual activities
- Able to work at heights
- Good hand-eye coordination
- Able to make simple calculations
- Able to work independently
- Able to cope with the physical demands of the job
- Able to work neatly and accurately

Education and Training

To become a wall and floor tiler you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

In some states and territories, wall and floor tilers carrying out work valued at more than a certain value must either be registered as, or work under the supervision of a registered building practitioner. All those who work in the construction industry must undergo safety induction training and be issued with a Construction Induction Card (CIC).

Employment Opportunities

Most tilers are either self-employed or work for small privately owned firms that carry out contract building work. A few are employed by firms manufacturing or selling tiles. They work mainly in cities or wherever large-scale building projects are under construction. Much of the work is undertaken on new buildings, including houses, shops, offices, factories and swimming pools. Wall and floor tilers also carry out renovations to existing buildings.

Demand for wall and floor tilers is closely linked to the level of construction activity.

Related Jobs

Construction Worker (p 286); Floor Finisher and Coverer (p 295); Roofer (p 317); Stonemason (p 321); Wall and Ceiling Liner (p 331).

Timber and Wood Production Worker

$1,013 | Entry level | Decline

Timber and wood production workers assist with the milling, processing and merchandising of timber and timber products such as sawn timber, timber mouldings, roof trusses, wall frames, laminated beams, plywood, hardboard, fibreboard, laminates and veneered products.

Timber and wood production workers:

- select types and grades of timber and measure and cut to order
- operate bandsaws, gangsaws or circular saws to convert logs to usable timber
- support and guide timber being sawn
- assist with the production of veneers, plywoods, laminates and paper products, often using sophisticated computerised equipment
- assemble fabricated products such as timber frames and trusses
- undertake specialist operations such as kiln drying and visual or mechanical stress grading
- stack and pack timber and prepare it for dispatch
- operate forklifts

- undertake administrative tasks such as record keeping, including tallying and ordering.

Most timber and wood production workers are employed in regional centres, in businesses ranging from small sawmills to large processing and manufacturing plants. The work can sometimes be physically demanding. However, working conditions have improved with the introduction of new technology and specialist equipment.

Personal Requirements

- Enjoy practical work
- Enjoy working with timber and timber products
- Alert and safety-conscious
- Able to cope with the physical demands of the job
- Good hand-eye coordination
- Basic mathematical ability

Education and Training

You can work as a timber and wood production worker without formal qualifications. You will probably get some informal training on the job. You can also become a timber and wood production worker through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Timber and wood production workers may be required to hold a License to Perform High Risk Work.

Employment Opportunities

Timber and wood production workers usually start as general hands in a timber mill. They progress to stacking and assisting with sawing before being put in charge of a saw or other machinery.

Tool and Die Setter

Medium skill

Stable

Tool and die setters set up and adjust machine tools and production machines, such as automatic lathes or multiple-operation machines.

Tool and die setters:

- study job cards, drawings or other instructions and determine the sequence of machine operation
- set up the cutting or shaping tools or dies needed in machines or presses for precision work
- measure and mark reference points and fix work pieces, position and fasten cutting tools, and adjust machine trowels using basic hand tools such as spanners, allen keys and screwdrivers
- adjust the guides, stops and other controls of machines to ensure stock is machined to the sizes required
- trial machines, make adjustments as required, advise or instruct operators and watch the first operations
- periodically check product sizes and report any problems or readjust machines using measuring instruments.

A tool and die setter is usually responsible for setting up and running a number of machines in a factory or workshop. These machines are then operated by other workers, usually in situations where large-scale production techniques are used. Tool and die setters work in factories and workshops, which can be noisy at times, although the work environment is generally spacious, ventilated and well lit. They wear protective clothing and may be required to stand for long periods.

Personal Requirements

- Enjoy practical work
- Good hand-eye coordination
- Patient
- Able to carry out accurate work
- Able to cope with the physical demands of the job
- Alert and safety-conscious
- Aptitude for technical activities

Education and Training

To become a tool and die setter you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Tool and die setters are mainly employed in organisations that manufacture plastic products, industrial machinery and equipment, fabricated metal products, basic iron and steel, motor vehicles and parts, household appliances and electrical equipment.

Related Jobs

Engineering Tradesperson - Mechanical (p 293); Locksmith (p 304); Product Assembler (p 313).

Trade Measurement Officer

$1,424

Lower skill

Stable

Also known as Weights and Measures Inspector

Trade measurement officers monitor the marketplace with respect to goods sold by measure to ensure the accuracy of claimed or advertised measurements. Typical transactions using measurement include fuel purchased for motor vehicles and goods purchased by weight in supermarkets.

Trade measurement officers:

- test weighing and measuring equipment for accuracy
- calibrate weights and measures to national measurement standards
- conduct accuracy checks on goods sold by weight or measure (pre-packed food, for example)
- apply the trade measurement law and investigate any fraud and prosecute if necessary
- prepare briefs of evidence and instruct legal staff in the conduct of enforcement actions in the courts
- provide advice and deliver education and promotion programs to traders and licensed repairers.

The work is performed at service stations, licensed premises, stores, supermarkets, factories and warehouses.

Personal Requirements

- Enjoy technical work
- Good communication skills
- Able to perform calculations accurately
- Australian citizenship or permanent residency

Education and Training

You can become a trade measurement officer without formal qualifications; however, completion of Year 12 or a trade qualification would be an advantage. You will need to apply to the National Measurement Institute who will assess your suitability. If your application is successful, you will undertake both formal

and informal training on the job. On successful completion of this training you will be awarded VET qualifications in Government (Trade Measurement) and Government (Investigation).

Additional Information

Trade measurement officers are required to hold a drivers licence. You may need to pass a medical examination as part of the application process.

Employment Opportunities

Trade measurement officers are employed by the National Measurement Institute, a division of the Australian Government Department of Industry.

Vacant positions are advertised on the APSJOBS website (www.apsjobs.gov.au). Contact the National Measurement Institute for further details.

Related Jobs

Local Government Inspector (p 156).

Trade Union Official

Also known as Union Organiser

Trade union officials work to maintain and improve the wages, conditions and employment opportunities of workers in particular occupations or industries. In some unions, trade union officials are elected from the union's membership, but in others they are appointed to paid positions. Officials with training in fields such as law, journalism, economics, accountancy and welfare may be appointed to specialist positions (such as legal officer or media officer). Research officers generally have tertiary qualifications that may be in a broad range of disciplines from arts to science.

Trade union officials:

- represent members in negotiations with management over workplace issues
- visit places of work where members of the union are employed to check on working conditions and to identify other industrial relations issues
- handle complaints and disputes on the job
- check employees' time and wage records (kept by employers) to ensure employees are being paid the correct wages
- ensure safety rules and regulations are observed in the workplace and advise employers of possible breaches
- recruit new members and make sure that current members are up to date with payment of their union fees and kept informed of union activities
- draft applications for award variations and, through research and inspections, collect evidence and prepare submissions in support of claims
- represent the union at conferences and in negotiations (may include acting as the union's representative or advocate before industrial courts or tribunals)
- assist with managing the finances of the union.

Personal Requirements

- Interested in trade union activities
- Good negotiation and communication skills
- Able to deal with employers and workers at all levels
- Able to stay calm in difficult situations and handle controversial and emotional issues objectively and analytically

Education and Training

There are no specific educational requirements to become a trade union official. Unions provide on-the-job and formal training. People often enter this occupation after experience in industry.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a trade union official by studying industrial relations, human resource management or occupational health and safety at university. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Although there is no formal career structure within trade unions, opportunities exist to move from base-level trade union official positions up to president. Skills and experience gained are transferable to other areas of work, such as industrial relations or politics.

The demand for trade union officials is affected by membership numbers, union involvement in enterprise bargaining agreements and amalgamations. The rules of each union determine the number of paid positions available.

Related Jobs

Human Resources Officer (p 59); Occupational Health and Safety Officer (p 178); Parliamentarian (p 159); Workplace Relations Officer (p 67).

Train and Network Controller

Train and network controllers move trains across their area of control using computerised and mechanical control systems, and liaise with other employees across the network to ensure trains run to schedule and safety standards are maintained.

Train and network controllers:

- operate mechanical or computerised signal equipment to control the running of trains
- liaise with all areas of the rail system to ensure smooth running of trains
- use computerised control systems to coordinate the safe crossing of trains and ensure they are on the right path
- control when the trains stop and start, ensuring they arrive at their destinations on time
- initiate and manage emergency procedures in the event of an incident, and coordinate the train network so that each train within the area remains safe.

Train and network controllers are required to work shifts, including weekends and public holidays.

Personal Requirements

- High-level communication skills
- Good problem-solving skills
- Able to act appropriately in emergency situations
- Able to work in a team environment
- Good memory for learning safety procedures and regulations

- Able to concentrate for long periods on detailed information
- Alert and safety-conscious

Education and Training

You can become a train and network controller without formal qualifications, but employers usually require Year 10. Once you are employed, you will receive intensive formal training, both on and off the job. On completion of this training, you may receive a nationally recognised qualification.

Additional Information

Applicants will go through a range of recruitment processes, including personality, aptitude and ability tests; an interview; and a medical assessment. Age limits may apply.

Employment Opportunities

Competition for train and network controller positions is very strong. Entrants often start at a lower level (as a railway station assistant, for example) and then work their way up to these positions. Train and network controllers are employed by railway owners and passenger and freight operators. Rail services are provided throughout Australia by passenger services, the national railway asset owner, and Australian Rail Track Corporation (ARTC).

With experience and further training, promotion to supervisory or other positions is possible.

Related Jobs

Air Traffic Controller (p 255); Train Driver (p 328).

Train Driver

Train drivers drive trains along a rail network in order to transport passengers or freight.

Train drivers:

- operate the train's controls
- manage and coordinate train movements
- stop at stations to pick up passengers or freight
- inspect trains and report defects or adjustments
- shunt rolling stock in marshalling yards
- provide information to passengers using an onboard communications system
- refuel diesel trains and check oil, water and sand, and top up as necessary
- observe and obey rail signalling instructions, speed limits and other railway rules, procedures and instructions from the network control centre.

All train drivers work shifts, which may include weekends and public holidays. Train crew on long-distance journeys may be required to stay away overnight.

Personal Requirements

- Ability to work within a team environment
- Good communication skills
- Able to solve mechanical and technical problems
- Good problem-solving and decision-making skills
- Good memory for learning safety procedures and regulations

Education and Training

To become a train driver you usually need to complete a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Applicants must undergo a selection process, including an interview, a medical assessment, and personality, aptitude and ability tests. Age limits may apply. You may need a current drivers licence, a National Police Check and a driving history report.

Employment Opportunities

Train drivers are employed by passenger and freight rail operators. Rail services are provided throughout Australia by passenger operators and national freight operators. With experience and further training, promotion to supervisory or other positions is possible.

Related Jobs

Bus Driver (p 279).

Transport Administrator

Transport administrators plan, organise and control the operational activities of road, rail, air and water transport.

Transport administrators:

- coordinate transport and related staff
- devise or approve methods and procedures for operating freight and passenger services, time schedules and routes
- review passenger and freight rate structures (where these are not controlled by government agencies and transport associations)
- help develop transport operating policies.

The transport administrator's role is becoming increasingly specialised and sophisticated. Transport administrators need a thorough understanding of the transport industry and knowledge of how the four principal types of transport interact. These are:

- Road Transport which comprises passenger (bus, coach, taxi) transport provided by government agencies and private companies; goods transport provided by general carriers such as courier, taxi, truck and heavy haulage services; and the operations of large commercial enterprises that have delivery vehicles such as bakeries and food processors.
- Rail Transport which comprises passenger transport in the metropolitan area, as well as passenger and goods transport provided in regional areas and interstate.
- Air Transport which comprises passenger and goods transport provided by private, domestic and overseas airlines.
- Sea Transport which comprises passenger and goods transport provided by local and overseas shipping companies.

Personal Requirements

- Good managerial and organisational skills
- Able to work under pressure
- Good communication skills

Education and Training

To become a transport administrator you usually have to complete a traineeship. Entry requirements may vary, but employers generally require Year 10.

You can also become a transport administrator through a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

Entry to this occupation may be improved if you have a business or commerce degree with a major in logistics, supply chain

management or a related field. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English and mathematics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Transport administrators are employed by major airlines, shipping companies, import and export firms, public transport authorities, large road transport firms, freight forwarders, courier services, and bus and coach operators. They may also work in consulting firms concerned with transport logistics or warehousing studies.

Related Jobs

Customs Broker (p 55); Logistics Clerk (p 304); Transport Clerk (p 329).

Transport Clerk

Transport clerks check the contents and related documents of freight goods. They tally and record the consignment and destination details of articles, containers and passengers. They also make freight or transport bookings, as well as related arrangements.

Transport clerks:

- check the number of articles or containers in consignments of goods received or dispatched
- make sure articles are in good condition and correspond to invoices, manifests or other records
- arrange internal distribution of goods received
- prepare and attach documentation to articles to be dispatched
- make sure clearance procedures (such as payment of any customs entry fees or duties) are carried out
- dispatch goods and arrange delivery promptly on arrival
- spend time packing and unpacking goods in warehouses
- drive between wharves, container terminals, airports and government departments
- weigh and calculate cubic dimensions of items
- contact senders to fix shortages and arrange replacement of damaged goods
- maintain records of receipts and dispatches
- undertake clerical work such as filing, accounting, updating customs records, preparing correspondence and inputting and retrieving information from computers.

Transport clerks who work for large organisations may work alongside other clerks in city offices. However, import/export firms often employ only one transport clerk who works in a small office.

Personal Requirements

- Good communication skills
- Good organisation skills
- Able to work neatly and accurately
- Able to learn to use electronic trading systems

Education and Training

You can work as a transport clerk without formal qualifications. You will probably get some informal training on the job. You can also become a transport clerk through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Transport clerks are employed by firms involved in the movement of goods. These include shipping agents, import/export companies, freight forwarding and storage companies and road haulage firms. Wholesalers and large manufacturing firms may also employ transport clerks. Demand is influenced by the state of the economy, the level of imports/exports and the use of computer technology to keep records of the movement of goods.

Related Jobs

Administrative Assistant (p 51); Customs Broker (p 55); Delivery Driver (p 288); Inventory and Supply Officer (p 302); Logistics Clerk (p 304); Storeperson (p 322); Transport Administrator (p 328).

Truck Driver

Truck drivers use heavy vehicles to transport goods and materials from one location to another.

Truck drivers:

- drive defensively and handle hazardous road conditions
- load goods onto the truck either by hand, or by using a forklift or other lifting equipment
- make sure loads are correctly placed and secured to avoid damage to the truck or goods
- couple and uncouple trailers
- perform pre- and mid-trip vehicle and security inspections
- carry out basic vehicle maintenance
- drive vehicles to their destination and unload
- carry out administrative duties, such as checking items against the inventory, recording damage, collecting payments and issuing receipts
- enter information into in-cab electronic equipment to record required trip information
- maintain a work diary with details of trips.

Truck drivers may drive company-owned vehicles or be owner-drivers. Owner-drivers must obtain their own delivery work. Truck drivers carry a wide variety of goods, including flammable substances, raw materials, building materials, manufactured goods, livestock and refrigerated products. This profession often requires early starts, long shifts and days away from home, as well as travelling long distances to country, interstate or remote areas. Some trucks are equipped with bunks, televisions, refrigerators and ergonomically designed seats.

Personal Requirements

- Enjoy practical work
- Mechanical aptitude
- Able to drive safely
- Able to cope with the physical demands of the job
- Safety-conscious
- Meet any age restrictions that may apply

Education and Training

You can work as a truck driver without formal qualifications. You will probably get some informal training on the job. Applicants must also undertake practical and written tests and obtain one or more heavy vehicle licences before commencing work.

You can also become a truck driver through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

You may be required to hold special licences when transporting certain cargoes, especially if you carry dangerous substances. In order to qualify for these licences, you must submit a medical certificate, an acceptable driving record and provide evidence of attending a competency training course administered by a Registered Training Organisation.

Employment Opportunities

Truck drivers may be employed by commercial firms, mining, manufacturing and transport companies, and government authorities, or they may be self-employed. Demand for truck drivers depends on the economy and on competition from other carriers such as rail and air freighters.

Related Jobs

Bus Driver (p 279); Car Driver (p 281); Driving Instructor (p 289); Forklift Operator (p 296); Furniture Removalist (p 297); Garbage Collector (p 298).

Tyre Fitter and Repairer

$1,014 Lower skill Stable

Tyre fitters and repairers fit and repair tyres on vehicles and diagnose faults in tyre wear.

Tyre fitters and repairers:

- inspect tyres and related components
- repair tyres and tubes
- select tyres and rims for particular vehicles
- balance and align tyres and wheels
- road test vehicles.

Personal Requirements

- Enjoy practical and manual activities
- No allergic reactions to petrol, grease, oil or other chemicals
- Interested in motor vehicles
- Good mechanical skills

Education and Training

You can work as a tyre fitter and repairer without formal qualifications. You will probably get some informal training on the job.

You can also become a tyre fitter and repairer through an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

A drivers licence is desirable.

Employment Opportunities

Tyre fitters and repairers and wheel aligners are mostly employed by tyre centres and wheel alignment specialists.

Related Jobs

Panel Beater (p 310); Vehicle Body Builder (p 331).

Upholsterer

Medium skill Decline

Upholsterers select, cut, sew and fit fabric or leather materials to furniture and repair damaged furniture.

Upholsterers:

- discuss colour, fabric, style and cost of upholstery with clients
- repair upholstered furniture by replacing covers, webbing, padding and springs
- staple lengths of webbing (a wide tape) on to the underside of the furniture frame
- stretch webbing from side to side, interlacing it to form a base for the padding
- lace tops of springs together to prevent sideways movement and staple hessian to the frame
- cut and fit foam padding
- measure and cut covering material, join sections and tack fabric onto the furniture frame
- cover staples with decorative braid, trim, buttons or nails and attach calico to the underside of the furniture.

Upholsterers generally work in workshops but occasionally may be required to work in clients' homes or other sites. Upholsterers stand for most of the day, as the furniture is normally placed on a benchtop while work is carried out.

Upholsterers may work in one or more of four main fields:

- Antique and Reproduction Upholstery - involves restoring genuine antiques or recreating the style of a certain era in history.
- Custom Upholstery - involves building furniture for special purposes, such as for use in hotels, ships and airports.
- Production Upholstery - involves upholstering mass-produced furniture in sections for the domestic or commercial market.
- Renovation and Repair Upholstery - involves replacing old and damaged upholstery.

Personal Requirements

- Enjoy practical and manual activities
- Able to work neatly and accurately
- Able to work independently or as part of a team
- Interested in furniture
- Able to cope with the physical demands of the job
- Normal colour vision
- Good hand-eye coordination

Education and Training

To become an upholsterer you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Upholsterers are employed by furniture makers in the production of commercial, household, marine and caravan furniture. Most furniture upholsterers work in factories making new furniture. Some work in small businesses, where they may undertake antique, customised, renovation, repair and recovery work, or combine repair and manufacture. Those specialising in restoration work require knowledge of old and modern techniques. Opportunities for self-employment are greater in restoration work.

Related Jobs

Cabinetmaker (p 280); Floor Finisher and Coverer (p 295); Interior Decorator (p 105); Interior Designer (p 105); Leather Goods Maker (p 302).

Vehicle Body Builder

Vehicle body builders manufacture purpose-built bodies to fit chassis produced by other manufacturers. They also modify and repair vehicle bodies. They may work on buses, coaches, caravans, armoured vans, tray and van bodies, mobile workshops, semi-trailers, refrigerated vans, horse floats, fire trucks and special police vehicles.

Vehicle body builders:

- manufacture framework sections in metal, wood, fibreglass and other materials by working from engineering drawings, and by using shaping machinery and all types of welding and cutting equipment
- form complete frameworks by welding or bolting sections to the vehicle's structure
- make the panels used to cover the framework by cutting, shaping and attaching panels of sheetmetal, aluminium, stainless steel or reinforced plastic
- fit axles, suspensions and brakes
- design and fit mechanised equipment, such as winches and hoists, to various types of vehicle chassis
- install door handles, locks and hinges
- design and carry out chassis alterations in consultation with engineers, or alter assembly line vehicles to special requirements.

As most vehicle body builders construct frames from metals, workshops can be noisy at times. Protective clothing and equipment must be worn when required.

Personal Requirements

- Enjoy practical and manual activities
- Good hand-eye coordination
- An eye for detail
- Aptitude for technical activities
- Interested in design and fabrication using metals and other products

Education and Training

To become a vehicle body builder you usually have to complete an apprenticeship or traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Vehicle body builders are employed primarily in the transport equipment industries, including bus and rail transport. A few are employed by firms that perform repair work. Some are self-employed. Because of the broad range of skills required, vehicle body builders can often transfer to related trade occupations that involve metal fabrication, hydraulics, mechanical fitting, sheet metal work or finishing. In large organisations, vehicle body builders occasionally work as technical officers or technicians, or in sales.

Related Jobs

Engineering Tradesperson - Fabrication (p 293); Panel Beater (p 310); Shipwright (p 320); Tyre Fitter and Repairer (p 330); Vehicle Painter (p 331).

Vehicle Painter

Also known as Spray Painter and Automotive Refinisher

Vehicle painters prepare surfaces of vehicles, match and mix colours, and apply primer and finishing coats of paint.

Vehicle painters:

- prepare surfaces to be painted by hand or machine
- mix and match paint by eye or by using computer technology to ensure correct colour match
- apply primer and finishing coats using spray guns and rub down surfaces between coats
- touch up paintwork and apply polish to vehicles
- remove masking papers before waxing and polishing finished paintwork
- paint signs or artwork on vehicles
- treat vehicles with rust-proofing chemicals.

Vehicle painters wear protective clothing and face masks.

Personal Requirements

- Enjoy practical and manual activities
- Good hand-eye coordination
- Normal colour vision
- No breathing-related problems
- No allergies to thinners or paints
- Able to stand or bend for lengthy periods

Education and Training

To become a vehicle painter you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Vehicle painters work for crash repair firms and motor vehicle manufacturers. Some are self-employed, usually in partnership with panel beaters. Experienced vehicle painters may become representatives for paint manufacturers or assessors with insurance companies.

Wall and Ceiling Liner

Wall and ceiling liners make, apply and fix the internal and external linings of commercial and domestic buildings. These linings may include office partitions, non-structural walls and ceilings.

Wall and ceiling liners:

- measure room walls, work out plasterboard layout and install insulation and moisture barriers
- measure and mark cutting lines on plasterboard
- cut plasterboard, lift and position panels, and nail, screw or glue them to walls, ceilings or wooden strips (battens)
- prepare corner beading panel mouldings, ceiling centres and other plaster fittings
- cover joins and nail holes with wet plaster or sealing compounds and smooth them using wet brushes and sand paper

- fix precast cornices and panel mouldings, ceiling centres and other plaster fittings
- install fire-rated wall barriers
- spray fibrous materials over surfaces to be covered
- install acoustic walls and treatments
- make fibrous plaster moulds in factories.

Wall and ceiling liners usually work in dusty conditions. They may work alone or in teams of two or three, both indoors and outdoors. They may have contact with the public.

Personal Requirements

- Enjoy practical work
- Good hand-eye coordination
- Able to work at heights
- Able to work neatly and accurately
- Able to read, interpret and work from plans

Education and Training

To become a wall and ceiling liner you usually have to complete an apprenticeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

In some states and territories, those carrying out building work valued more than a certain amount must either be registered as, or work under the supervision of, a registered building practitioner.

When working at heights, industry standards require wall and ceiling liners to obtain a licence to Perform High Risk Work issued by the WorkCover or WorkSafe body in each state and territory. To gain a licence, you will need to complete units of competency at an approved Registered Training Organisation and work under the supervision of a licensed operator. You will also need to keep an approved logbook to record competencies achieved during training. Assessment by a licensed assessor will then be required. The Perform High Risk Work Licence is issued under the National Standard for Licensing Persons Performing High Risk Work. You must be 18 years of age to be eligible to obtain a Perform High Risk Work Licence. However, training may commence at a younger age.

All those who work in the construction industry must undergo safety induction training and be issued with a Construction Induction Card (CIC).

Employment Opportunities

Wall and ceiling liners are employed by plastering subcontracting firms, building and construction companies, and businesses that manufacture plaster products. Many wall and ceiling liners are self-employed and work on a subcontract basis. The demand for wall and ceiling liners depends on activity in the building industry, particularly in the housing sector.

Trade qualifications are sought after, but are not essential. Demand is subject to changes in building activity. Qualified tradespeople are less likely to be affected by downturns in demand.

Related Jobs

Tiler - Wall and Floor (p 325).

Waterside Worker

Also known as Docker , Stevedore and Wharf Labourer

Waterside workers stack, check and secure contents of shipping containers prepared for storage or dispatch.

Waterside workers:

- pack and unpack containers, open and close hatches and secure cargo to prevent it shifting during voyages
- clean holds and containers and prepare stevedoring (shiploading) gear
- operate a wide range of light and heavy machinery, including forklifts, skid-steer loaders, front-end loaders and a variety of cranes
- perform a wide range of clerical duties such as recording and checking cargo on arrival, storage or dispatch
- direct equipment operations using various types of communication systems
- moor and unmoor ships on arrival and departure
- stack cargo on pallets, trays, flats and slings to facilitate transfer to and from ships
- operate and perform minor maintenance checks on forklifts, trucks, front-end loaders and fixed or mobile cranes
- act as team leader for a wharf or on-ship work team.

Waterside workers usually work outdoors in ports, container terminals and the holds of ships. They work in most weather conditions, except very strong winds, and may have to work with frozen or dangerous goods, in freezers or in dusty conditions. They usually work shifts involving nights, weekends and public holidays.

Personal Requirements

- Enjoy practical and manual activities
- Able to work in a team
- Able to cope with the physical demands of the job
- Capable of lifting and carrying heavy items
- Good communication and organisational skills

Education and Training

You can work as a waterside worker without formal qualifications. You will probably get some informal training on the job. You can also become a waterside worker through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

To perform many of the tasks involved in stevedoring, industry standards require waterside workers to hold a licence to Perform High Risk Work. To gain a licence, you will need to complete units of competency at an approved Registered Training Organisation and work under the supervision of a licensed operator. You will also need to keep an approved logbook to record competencies achieved during training. Assessment by an independent assessor will then be required. To obtain a licence, you will need to be at least 18 years of age.

Employment Opportunities

Waterside workers are usually employed by private stevedoring companies, with some workers employed by state port authorities and related organisations, including local government.

Related Jobs

Airline Baggage and Freight Handler (p undefined); Crane Operator (p 287); Delivery Driver (p 288); Forklift Operator (p 296); Furniture Removalist (p 297); Mobile Plant Operator (p 307); Rigger (p 316); Storeperson (p 322); Transport Clerk (p 329).

Veterinary science

If you have excellent communication skills and a passion for animals and science, a career in veterinary science could be for you. While most veterinary science graduates work in private practice, there are many alternative career destinations: government services (in areas such as livestock disease control or diagnostic service work), research or rural industries. Opportunities are also emerging in genetic technologies, food safety, animal welfare and urban animal management.

Courses and specialisations

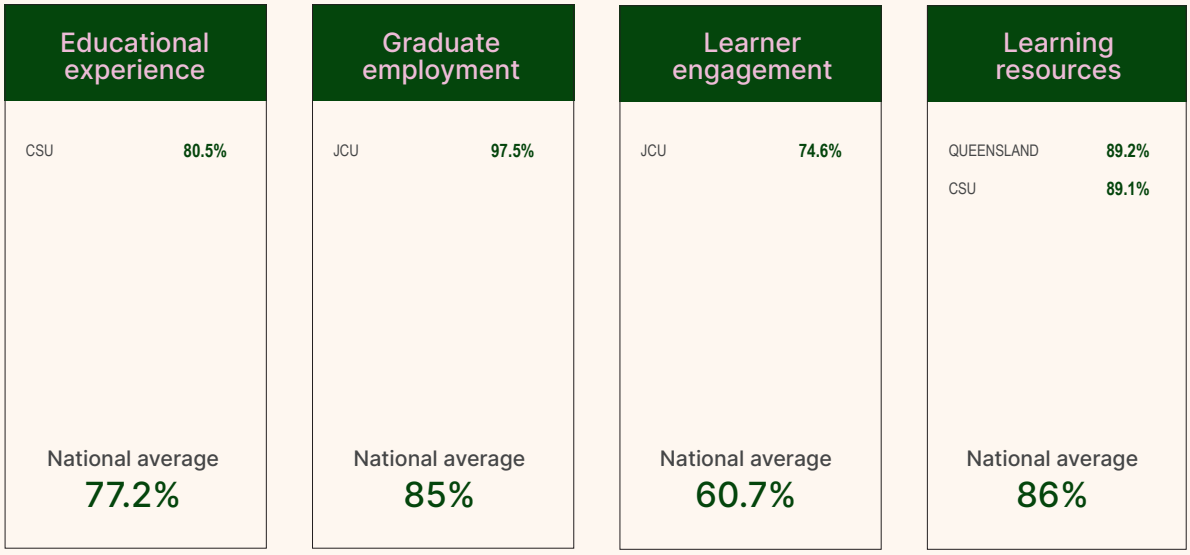
Almost all veterinary science courses involve five to seven years of full-time study, and insist on the same broad-based training. Courses place a strong emphasis on practical work, with students working under supervision in external or university-operated veterinary clinics — sometimes in a farm setting. Courses also require professional practical work in semester breaks and between academic years.

Australian veterinary practitioners must abide by the code of practice dictated by the Australian Veterinary Association (AVA). Each year, they must register with the Veterinary Surgeons Board or Veterinary Practitioners Registration Board in the state or territory in which they intend to practise.

Where to study

Entry into veterinary science courses is extremely competitive and often demands near-perfect ATAR scores. They may also require prerequisite subjects (typically in one or more of maths, physics, biology and chemistry), but this should be checked with individual institutions as they vary. Part of the reason for the tough entry requirements of veterinary science courses is that only a limited number of institutions offer them.

Five-star universities



What do these numbers mean? The ratings above represent the top 20 per cent of results for each measure in this particular field of study. For overall institution results, flip this book and visit the ratings section of *The Good Universities Guide*.

Number of students

3,285
Undergraduate

1,465
Postgraduate

669
International undergraduate

What can I do?

Wildlife conservation
Zoology
Animal rescue
Veterinary science
Animal welfare

Graduate starting salary

$55,600
Undergraduate

$61,400
Postgraduate

Full-time employment

The proportion of students who have secured a full-time job within four months of graduating

85%
Undergraduate

94.3%
Postgraduate

Five-star universities

Median starting salary		Skills development		Student support		Teaching quality	
CSU	$71,400	JCU	91.5%	LA TROBE	82.4%	MURDOCH	88.5%
National average	$55,600	National average	82.3%	National average	75.2%	National average	80.9%

Data has been sourced from the Graduate Outcomes Survey, the Student Experience Survey and incomes data from the Australian Taxation Office.

Animal Attendant

Also known as Dog Care Worker

Animal attendants provide food, water and care for animals.

Animal attendants:

- prepare food (including special diets) and deliver food and water to animals
- clean and prepare comfortable sleeping quarters for animals
- clear away animal waste; clean, disinfect and maintain animal enclosures and cages; and check locks
- bathe and groom animals, and treat them with insecticide to control insect pests
- treat minor injuries and report serious health problems to veterinarians
- administer basic medications as directed by veterinarians
- transfer animals between enclosures
- assist with animal behavioural assessments and behaviour modification
- rescue injured and neglected animals
- assist with euthanising animals humanely and handling of animals that have died
- maintain animal records
- talk with the public and other staff.

Working conditions vary depending on the place of work. Some attendants have to work on weekends and public holidays. Many work outdoors. Considerable contact with the public is involved when accepting donations and lost or unwanted animals, and when selling or adopting animals.

Specialisations

- Kennel Hand
- Pet Groomer
- Pet Shop Attendant

Personal Requirements

- Enjoy practical and manual activities
- Good communication skills and enjoy working with people
- Mature and responsible
- Able to work well in a team
- Free from allergies aggravated by animal hair, fur, feathers and dust
- Able to cope with the physical demands of the job, undertaking manual and sometimes heavy work
- Able to handle animals with confidence and patience
- Interested in animals and their welfare
- Observant and methodical

Education and Training

You can work as an animal attendant without formal qualifications.You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications.You may like to consider a VET qualification in animal studies, animal technology, captive animals, companion animal services or a related area. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become an animal attendant through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Animal attendants can work in a wide range of workplaces, including animal shelters, catteries, kennels, dog parlours or salons, pet shops, larger veterinary hospitals and clinics, zoos,circuses, theme parks and wildlife parks.

Competition for jobs is strong as there are usually many more people seeking to enter this occupation than there are positions available. Dog clipping and grooming is a growth area that may provide self-employment opportunities.

Related Jobs

Animal Technician (p 232); Dog Trainer (p 335); Farm Hand (p 32); Guide Dog Mobility Instructor (p 336); Laboratory Worker (p 240); Stablehand (p 38); Track Rider (p 272); Veterinarian (p 337); Veterinary Nurse (p 338).

Dog Trainer

Dog trainers teach dogs to obey commands and perform specific tasks.

Dog trainers:

- train dogs to obey commands such as sitting and lying down, staying in one place and coming when called
- teach dogs to wear a leash and collar
- discourage bad habits such as chasing cars, being aggressive with children, excessive barking and digging holes
- conduct instruction classes for owners and their dogs
- teach owners to manage and train dogs in the behaviour they require
- teach the owner how to handle their dog so that it will obey commands and not return to bad habits
- give advice to owners on how to train, manage and take the best care of their dog, and how to solve problematic behaviour.

Dogs are usually in training for six to eight weeks. In intensive training programs, dogs can be kept in the full-time care of the trainer. To train dogs so intensively, the dog trainer must work with them every day. As dogs can only be taught for about 10 or 15 minutes at a time, trainers usually work with them once in the morning and once in the afternoon. Trainers need to be knowledgeable in dog behaviour, learning theory, practical training of dogs and instructing owners.

Specialisations

- Detection/Defence Dog Trainer

Personal Requirements

- Calm, confident demeanour with dogs
- Patience with dogs and owners
- Good interpersonal and communication skills
- Able to persevere
- Observant
- Alert to changes in dogs' behaviour

Education and Training

You can work as a dog trainer without formal qualifications, but employers usually require Year 10. Skills are usually developed through practice and experience with dogs, which may be obtained by joining a local dog obedience club, working in kennels or working as an assistant to a professional trainer. A Provide First Aid Certificate and basic animal nursing training are considered an advantage. Entry to this occupation may be improved if you have a VET qualification. As subjects and prerequisites can vary

between institutions, you should contact your chosen institution for further information.

Employment Opportunities

Dog trainers work for the Australian Border Force, state and Federal Police, the Australian Defence Force, security companies, boarding kennels, dog training clubs and community parks. Most dog trainers are self-employed or work in partnerships. Those wishing to set up their own business will need extensive experience with dogs and sufficient start-up money. While most dog trainers are employed on a part-time basis, some may be employed full time. Instructors at dog training clubs are usually voluntary workers.

The Australian Border Force, state and Federal Police and the Australian Defence Force select potential dog trainers from within their departments and conduct internal training courses. The Australian Border Force holds its courses at Customs House in the region to which you have been recruited. Dog trainers working with security firms often have a defence or police background. see the separate entries for Police Officer - State, Police Officer - Australian Federal Police, Border Force Officer, Air Force General Entrant, Army Soldier and Navy Sailor for education and training requirements for these occupations.

Related Jobs

Guide Dog Mobility Instructor (p 336).

Guide Dog Mobility Instructor

$986

Medium skill

Strong

Guide dog mobility instructors train dogs to guide people who are blind or vision-impaired. They also train these people to use and care for a guide dog.

Guide dog mobility instructors:

- work with a team of specially chosen dogs that have undergone initial socialisation through the Guide Dogs Association of Australia's puppy-raising scheme
- over a period of four to six months, put the dogs through an intensive assessment and training program
- train the dogs to guide people with little or no sight through all likely independent travel situations
- conduct interviews and assessments of all applicants for guide dogs
- conduct a matching meeting, whereby guide dogs are matched to clients on the waiting list
- train a person who is vision-impaired to use a guide dog at either a residential training facility or within the person's home area. Training is conducted over a period of three to six weeks. For people trained in the centre-based program, additional follow-up instruction of three to five days is provided upon the person's return home.

Personal Requirements

- Good health, hearing and eyesight
- Full mobility and a good level of physical fitness
- Desire to work with people who are vision-impaired
- Flexible and adaptable
- Able to work both independently and as part of a team
- Love of, and aptitude for, working with dogs

Education and Training

To become a guide dog mobility instructor you usually have to complete a relevant degree, followed by a cadetship with the guide dogs association in your state or territory. This cadetship includes completion of a postgraduate qualification in orientation and mobility.

Relevant degrees include those majoring in social sciences, disability studies, human services, psychology, nursing or education. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Entry to postgraduate courses usually requires completion of an appropriate bachelor degree. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Additional Information

Depending on your state or territory, you may need a drivers licence and a Provide First Aid Certificate.

Many guide dog schools in Australia are members of the International Guide Dog Federation (IGDF), which is made up of approximately 80 guide dog schools from around the world. A qualification obtained from an IGDF-accredited school is recognised internationally by member schools.

Employment Opportunities

Guide dog mobility instructors are employed by guide dog associations around Australia and internationally.

Job opportunities depend on the incidence of visual impairment in the community and the availability of funds for associations. There is a high level of competition for available positions.

Related Jobs

Animal Attendant (p 335).

Horse Trainer

$986

Medium skill

Strong

Horse trainers supervise the preparation of horses for thoroughbred or harness races, advise and consult with owners and instruct stable staff and jockeys/drivers. Horse trainers usually specialise in thoroughbreds for galloping races, standardbreds for pacing or trotting (harness) races, or performance horses for events, show jumping and dressage.

Horse trainers:

- carry out practical daily tasks, such as saddling, bridling, feeding and grooming horses
- accustom horses to racing equipment such as bridles, saddles, harnesses and sulkies (two-wheeled carriages)
- support the training of apprentice jockeys, drivers and track riders in horse riding or driving techniques and horse handling skills
- supervise and direct stable staff, jockeys, harness drivers and other workers
- plan, supervise and carry out training programs for horses
- plan and select race programs to achieve the best placing for a horse
- plan, supervise and carry out nutritional programs for horses
- monitor the health of the horses and consult veterinarians and farriers on injuries and ailments
- advise and consult with horse owners
- attend race meetings or other horse-related events
- keep accurate records of accounts and use correct credit procedures.

Horse trainers may be required to work long hours. Much of their work is carried out very early in the morning and they may continue to work all day. Regular weekend work is also required.

Personal Requirements

- A keen interest in horses
- Patient
- Able to cope with the physical demands of the job
- Enjoy outdoor work
- Good communication skills

Education and Training

You can work as a horse trainer without formal qualifications, but employers usually require Year 10. You will probably get some informal training on the job.

Entry to this occupation may be improved if you have qualifications. You may like to consider a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information.

You can also become a horse trainer through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Employment Opportunities

Horse trainers are mainly employed in the horse racing industry. They work in horse studs, racing and training stables and riding schools. Some work as freelance coaches and trainers, breaking in, schooling and retraining horses from the racetrack for careers in show jumping, events and dressage.

In the larger stables, and with experience, horse trainers may progress to supervisory and managerial positions.

Many horse trainers operate their own business, training their own horses or training horses for outside owners and racing syndicates.

Related Jobs

Animal Attendant (p 335); Animal Technician (p 232); Dog Trainer (p 335); Guide Dog Mobility Instructor (p 336); Stablehand (p 38); Track Rider (p 272).

Veterinarian

Veterinarians diagnose, treat and help to prevent disease and injury in animals. They advise on measures to prevent the occurrence or spread of diseases and on ways to improve the health and productivity of animals, and supervise safety standards on food supplies.

Veterinarians:

- examine sick and injured animals and perform diagnostic tests
- examine tissue and samples from sick animals to identify the cause of disease
- treat animals using drugs, surgical procedures and nursing care
- vaccinate animals to prevent disease
- certify viability of animals for breeding and performance
- give advice about animal health and care to owners and breeders
- euthanise animals in a humane fashion to end pain and suffering or to prevent the spread of disease
- may advise on feeding and breeding strategies to achieve maximum production
- notify authorities of outbreaks of animal diseases and certify animals for exportation
- attend horse and greyhound tracks, animal-related sporting events, and dog and cat shows to monitor and/or advise on the condition of animals
- supervise the handling and health of livestock destined for export
- supervise quarantine for incoming livestock, genetic material and animal products
- assist in public education programs, promoting the welfare of animals.

Veterinarians may work indoors or outdoors depending on the location of their employment. They usually work long and irregular hours, especially those in private practice who may be called upon to treat sick animals at any hour of the day or night.

Personal Requirements

- Interested in the health and welfare of animals
- Observant
- Good analysing, problem-solving and decision-making skills
- Good communication skills
- Aptitude for science
- An inquiring mind
- Organisational and supervisory skills

Education and Training

To become a veterinarian you usually have to complete an accredited veterinary science degree at university. Alternatively, you can complete a relevant degree such as science, animal science or veterinary bioscience, followed by a Doctor of Veterinary Medicine. To get into these courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, biology, chemistry and physics are normally required. Universities have different prerequisites and some have flexible entry requirements. Contact the institutions you are interested in for more information.

Additional Information

Veterinarians abide by a code of practice put in place by the Australian Veterinary Association. They must re-register annually with the Veterinary Surgeons Board or Veterinary Practitioners Registration Board of each state or territory in which they intend to practise.

Employment Opportunities

Most veterinarians concentrate on a specific area of work such as small animals, horses or livestock. They generally work as principals or associates in private practices. These are small businesses that typically employ one to six veterinarians. Most of the work in private practices involves pet dogs and cats, although there are also some practices specialising in horses. Practices dealing mainly with farm animals are usually based in country towns and provide services to cattle, sheep, pigs and occasionally other farm animals, as well as to domestic animals.

Veterinary graduates are often employed by government departments. They may be involved in monitoring, controlling and eradicating animal disease; diagnostic service work; research into animal disease, genetic material, animal products and meat quality; hygiene inspection to ensure the health of animals and the safety of food; livestock quarantine; and regulating agricultural and veterinary chemicals. Veterinarians may also contribute to programs relating to animal production, disease control, environment management and public health.

The demand for veterinarians depends on the level of pet ownership and the willingness and ability of pet owners to pay for veterinary services. Government staffing policy, the viability of farm animal practices, the effect of natural conditions on animals (floods, droughts and fire, for example) and developments in livestock management also affect the demand for veterinarians.

Related Jobs

Agricultural Scientist (p 28); Animal Attendant (p 335); Animal Technician (p 232); Health Promotion Practitioner (p 174); Microbiologist (p 243); Pharmacologist (p 216); Primary Products

Inspector (p 312); Toxicologist (p 207); Veterinary Nurse (p 338); Zoologist (p 338).

Veterinary Nurse

Veterinary nurses provide support to veterinarians in the management and care of animals receiving medical and surgical treatment.

Veterinary nurses:

- assist veterinarians during consultations, examinations and treatments
- coordinate patient admission and discharge
- care for hospitalised animals, including wound management and bandaging support, feeding and exercising
- assist with surgery preparations by clipping and shaving fur or hair, swabbing skin, and administering and monitoring anaesthesia
- provide surgical support by handling instruments, swabbing blood, monitoring oxygen and intravenous fluids, and providing post-operative care
- perform diagnostic laboratory tests (including urine, faecal and blood tests) and assist veterinarians to produce diagnostic radiographs
- assist with procedures involving radiography, ultrasound, endoscopy and electrocardiography
- give medication to animals under the direction of a veterinarian
- maintain hygiene by cleaning and disinfecting animal cages, floors, benchtops, consulting rooms, waiting rooms and surgeries
- sterilise instruments, dressings and other equipment
- maintain stock control of medicines, bandages, cotton wool, syringes and other equipment
- maintain equipment to be in good working order
- perform reception duties, including answering the telephone, making appointments, preparing accounts, accepting payments and writing receipts
- provide animal care information on nutrition, parasite control and behaviour
- educate owners about responsible pet ownership and maintaining the health and wellbeing of their pets
- record and maintain clinical and office records of animals attending the surgery (usually on a computer).

Veterinary nurses work as part of a team in veterinary consulting rooms, surgeries and hospitals. They generally work under strict clinical conditions. They may also be involved in the management of the staff and financial and technical resources of a veterinary practice, animal hospital or similar treatment facility. Working hours may be irregular, including evening and weekend work.

Personal Requirements

- Enjoy working with animals
- Able to handle animals with confidence and patience
- Able to make accurate observations
- Good communication skills
- Good organisational skills
- Able to work as part of a team

Education and Training

To become a veterinary nurse you usually have to complete a VET qualification. As subjects and prerequisites can vary between institutions, you should contact your chosen institution for further information. You can also become a veterinary nurse through a traineeship. Entry requirements may vary, but employers generally require Year 10.

Additional Information

Students are usually required to organise access to a veterinary clinic for full-time or part-time employment and work practice. After completing the Certificate IV in Veterinary Nursing and gaining 12 months of experience, you may be able to apply for accreditation with the Veterinary Nurses Council of Australia (VNCA). Veterinary nurses in WA are required to register with the Veterinary Surgeons' Board of WA.

Employment Opportunities

Veterinary nurses are mainly employed by veterinarians in private practices, but some find work looking after animals in zoos, wildlife parks and animal welfare organisations, as well as in veterinary research and teaching institutions. Some experienced veterinary nurses are now gaining employment in marketing and merchandising with veterinary pharmaceutical organisations. A small number are also entering the field of veterinary practice management, or specialising in specific areas such as dental, surgical support or emergency and critical care nursing.

Related Jobs

Animal Attendant (p 335); Animal Technician (p 232); Laboratory Worker (p 240); Veterinarian (p 337).

Zoologist

Zoologists are biologists who study the structures, characteristics, functions, ecology and environments of animals to increase scientific knowledge and develop practical applications in wildlife management, conservation, agriculture and medicine. Zoologists usually specialise in one aspect of study such as entomology (insects), parasitology (internal and external parasites), ecology (environment of animals), ethology (animal behaviour), ichthyology (fish), mammalogy (mammals), ornithology (birds), herpetology (reptiles) or physiology (functions of animals).

Zoologists:

- investigate the interrelationships between animals and their environment by studying animals in their natural surroundings, as well as in captivity and laboratories
- study and perform experiments to identify species and gather data on growth, nutrition, reproduction, prey and predators
- study the development and functions of animals
- devise methods of population control, especially of vermin and pests
- develop programs to increase or manage the population of wild animals and animals in captivity
- undertake surveys of fauna and prepare reports for

management agencies
- prepare or supervise the preparation of laboratory reports and scientific papers
- supervise and coordinate the work of technical officers and technicians
- conduct lectures at tertiary institutions
- participate in wildlife awareness programs for the public.

Zoologists usually specialise in one aspect of study such as entomology (insects), parasitology (internal and external parasites), ecology (environment of animals), ethology (animal behaviour), ichthyology (fish), mammalogy (mammals), ornithology (birds), herpetology (reptiles) or physiology (functions of animals).

Personal Requirements

- A keen interest in research and the study of living organisms
- Good observation skills
- Able to work accurately
- A logical approach to problem-solving
- Good oral and written communication skills
- Able to work independently or as part of a team

Education and Training

To become a zoologist you usually have to complete a degree in science or applied science at university with a major in zoology or biological sciences. To get into the degree courses you usually need to gain your Senior Secondary Certificate of Education. Prerequisite subjects, or assumed knowledge, in one or more of English, biology, earth and environmental science, chemistry, mathematics and physics are normally required. Universities have different prerequisites and some have flexible entry requirements or offer external study. Contact the institutions you are interested in for more information.

Employment Opportunities

Opportunities for employment are varied. Some zoology graduates work as laboratory or research assistants in applied, biomedical and pure research projects. Zoologists with postgraduate qualifications may be employed in teaching and research in universities and colleges, or in pure and applied research in the animal, ecosystem and marine divisions of the Commonwealth Scientific and Industrial Research Organisation (CSIRO). They may also be employed by museums, zoos, state and territory departments of agriculture, and organisations concerned with conservation, wildlife management, environmental control, fisheries and national parks. In addition, there are positions in the animal breeding and genetics industry. Some zoology graduates obtain a postgraduate qualification in education and teach science in secondary schools.

Employment prospects for zoologists depend on the amount of biological and agricultural research conducted by government agencies, universities and other organisations.

Related Jobs

Agricultural Scientist (p 28); Animal Attendant (p 335); Animal Technician (p 232); Biotechnologist (p 234); Environmental Scientist (p 31); Forester (p 34); Marine Biologist (p 241); Microbiologist (p 243); Pharmacologist (p 216); Research Officer (p 244); Toxicologist (p 207); Veterinarian (p 337).

Want to learn more about researching and choosing a career?

Find all that and more in *The Good Careers Guide* - just flip this book to check it out!

Section 3:

A-Z career descriptions index

A

Abattoir Worker, *see* Meat Processing Worker 306
Aboriginal Affairs Administrator, *see* Community Worker 249
Aboriginal and Torres Strait Islander Community Liaison Officer, *see* Indigenous Community Liaison Officer 155
Aboriginal Community Police Officer, *see* Indigenous Community Liaison Officer 155
Aboriginal Health Worker, *see* Aboriginal/Torres Strait Islander Health Worker 167
Aboriginal/Torres Strait Islander Education Worker, *see* Education Aide 123
Aboriginal/Torres Strait Islander Health Practitioner, *see* Aboriginal/Torres Strait Islander Health Worker 167
Aboriginal/Torres Strait Islander Health Worker 167
Aboriginal/Torres Strait Islander Hospital Liaison, *see* Aboriginal/Torres Strait Islander Health Worker 167
Accountant 50
Accounts Clerk, *see* Bookkeeper 54
ACT Police Officer, *see* Police Officer - Australian Federal Police 160
Actor 94
Actuary 50
Acupuncturist, *see* Chinese Medicine Practitioner 201
Addiction Medicine Practitioner, *see* Medical Practitioner 202
Administrative Assistant 51
Advertising Account Executive 51
Advertising Specialist, *see* Advertising Account Executive 51
Aeronautical Engineer, *see* Aerospace Engineer 136
Aeronautical Telecommunications Officer, *see* Air Traffic Controller 255
Aerospace Engineer 136
Aged Care Nurse 210
Aged Care Worker 167
Agricultural Adviser, *see* Agricultural Scientist 28
Agricultural Biotechnologist, *see* Agricultural Scientist 28
Agricultural Engineer 136
Agricultural Entomologist, *see* Agricultural Scientist 28
Agricultural Microbiologist, *see* Agricultural Scientist 28
Agricultural Scientist 28
Agricultural Technical Officer 28
Agricultural Technical Officer, *see* Agricultural Scientist 28
Agronomist, *see* Agricultural Scientist 28
Air Force Officer 150
Air Force Trades 151
Air Security Officer, *see* Security Officer 318
Air Traffic Controller 255
Aircraft Maintenance Engineer 137
Aircraft Maintenance Engineer (Avionics), *see* Aircraft Maintenance Engineer 137
Aircraft Maintenance Engineer (Mechanical), *see* Aircraft Maintenance Engineer 137
Aircraft Maintenance Engineer (Structures), *see* Aircraft Maintenance Engineer 137
Aircraft Maintenance Engineering Tradesperson, *see* Aircraft Maintenance Engineer 137
Aircraft Maintenance Technician, *see* Aircraft Maintenance Engineer 137
Aircraft Mechanic (Avionics), *see* Aircraft Maintenance Engineer 137
Aircraft Mechanic (Mechanical), *see* Aircraft Maintenance Engineer 137
Airline Customer Service Agent, *see* Airline Passenger Officer 255
Airline Customer Service Officer, *see* Airline Passenger Officer 255
Airline Passenger Officer 255
Airport Engineer, *see* Civil Construction Worker 284
Anaesthesia Paramedical Officer, *see* Anaesthetic Technician 168
Anaesthetic Technician 168
Anaesthetist, *see* Medical Practitioner 202
Analyst (Information Technology) 80
Analytical Chemist, *see* Chemist 235
Animal Attendant 335
Animal Scientist, *see* Agricultural Scientist 28
Animal Technician 232
Animator, *see* Illustrator 103
Anthropologist 184
Anti-Money Laundering Specialist 52
Apiarist, *see* Beekeeper 29
App Designer 80
Applications Systems Analyst, *see* Analyst (Information Technology) 80
Applied Anthropologist, *see* Anthropologist 184
Applied Industry Economist, *see* Economist 56
Aquaculture Technician 29
Arborist, *see* Horticultural Tradesperson 300
Archaeologist 184
Architect 43
Architectural Draftsperson 43
Architectural Technologist, *see* Architectural Draftsperson 43
Archivist 185
Army Officer 151
Army Soldier 152
Army Trades 153
Aromatherapist, *see* Natural Therapist 177
Art Practitioner, *see* Artist 95
Art Restorer, *see* Conservator 186
Art Therapist 94
Artificial Insemination Technical Officer, *see* Agricultural Scientist 28
Artist 95
Arts Administrator 95
Arts and Cultural Planner, *see* Arts Administrator 95
Associate Editor, *see* Editor 72
Astronomer 232
Astrophysicist, *see* Physicist 243
Athlete, *see* Sportsperson 271
Atmospheric and Environmental Physicist, *see* Physicist 243
Atomic and Molecular Physicist, *see* Physicist 243
Attendant Care Worker, *see* Disability Support Worker 172
Auctioneer 52
Audio Engineer, *see* Sound Technician 111
Audiologist 168
Audiometrist 169
Audiovisual Technician 96
Auditor, *see* Accountant 50
Australian Federal Police Officer, *see* Police Officer - Australian Federal Police 160
Australian Public Servant, *see* Public Servant - Australian Public Service 163
Author, *see* Writer 191
Automotive Air Conditioning Fitter 275
Automotive Air Conditioning Specialist, *see* Automotive Air Conditioning Fitter 275
Automotive Airconditioning Fitter, *see* Automotive Air Conditioning Fitter 275
Automotive Electrical Mechanic, *see* Automotive Electrician 276
Automotive Electrician 276
Automotive Machinist, *see* Engine Reconditioner 292
Automotive Refinisher, *see* Vehicle Painter 331

B

Bailiff, *see* Court Officer 195
Baker 256
Ballerina, *see* Dancer 98
Ballet Dancer, *see* Dancer 98
Bank Customer Service Representative, *see* Bank Officer 53
Bank Officer 53
Bank Teller/Customer Service Officer, *see* Bank Officer 53
Bar Attendant 256

Bar Manager, *see* Bar Attendant....256
Barber....276
Barista....257
Barrister, *see* Lawyer....196
Beautician, *see* Beauty Therapist....277
Beauty Consultant, *see* Beauty Therapist....277
Beauty Therapist....277
Beekeeper....29
Beverage Attendant, *see* Bar Attendant....256
Bicycle Mechanic, *see* Bicycle Technician....277
Bicycle Repairer, *see* Bicycle Technician....277
Bicycle Technician....277
Big Data Analyst....81
Binder and Finisher....278
Biochemist....233
Biological/Physical Anthropologist, *see* Anthropologist....184
Biomechanist, *see* Exercise Scientist....173
Biomedical Engineer....233
Biotechnologist....234
Blacksmith, *see* Engineering Tradesperson - Fabrication....293
Blaster, *see* Shotfirer....320
Blog Writer, *see* Writer....191
Boatbuilder, *see* Shipwright....320
Boating and Fisheries Patrol Officer, *see* Fisheries Officer....33
Body Artist....96
Bodyguard, *see* Security Officer....318
Boilermaker (Heavy Fabrication), *see* Engineering Tradesperson - Fabrication....293
Boner and Slicer, *see* Meat Processing Worker....306
Book Binder, *see* Binder and Finisher....278
Book Editor, *see* Editor....72
Bookkeeper....54
Border Force Officer....153
Botanist....234
Bouncer, *see* Security Officer....318
Brain Surgeon, *see* Surgeon....206
Bricklayer....278
Broadcaster, *see* Media Presenter....74
Broadcasting Technician....97
Budget Accountant, *see* Accountant....50
Builder....278
Builder's Labourer, *see* Building Labourer....279
Builder's Labourer, *see* Construction Worker....286
Building Certifier, *see* Building Surveyor....44
Building Designer, *see* Architectural Draftsperson....43
Building Inspector, *see* Building Surveyor....44
Building Labourer....279
Building Surveyor....44
Bursar, *see* Accountant....50
Bus Driver....279
Business Systems Analyst....54
Business Systems Planner, *see* Business Systems Analyst....54
Butcher....257

C

Cabin Crew, *see* Flight Attendant....264
Cabinetmaker....280
Cable Jointer....281
Car Driver....281
Car Electrician, *see* Automotive Electrician....276
Car Wash Attendant....282
Cardiac Technologist....169
Cardiovascular Surgeon, *see* Surgeon....206
Care Service Worker, *see* Aged Care Worker....167
Career Adviser, *see* Career Development Practitioner....122
Career Counsellor, *see* Career Development Practitioner....122
Career Development Practitioner....122
Carpenter....282
Cartographic Drafter, *see* Cartographic Technician....235
Cartographic Technician....235
Cartoonist, *see* Illustrator....103
Cashier....283
Caterer....258
Celebrant, *see* Civil Celebrant....284
Cellarhand, *see* Winery Worker....274
Cement Renderer, *see* Solid Plasterer....321
Checkout Operator, *see* Cashier....283
Cheesemaker....258
Chef....259
Chef de Cuisine, *see* Chef....259
Chef de Partie, *see* Chef....259
Chemical and Hydrocarbon Plant Technician, *see* Chemical Plant Operator....283
Chemical Engineer....137
Chemical Plant Operator....283
Chemical Process Engineer, *see* Chemical Engineer....137
Chemical Scientist, *see* Chemist....235
Chemist....235
Chief Sub-editor, *see* Editor....72
Child Carer....249
Child Care Aide, *see* Early Childhood Educator....122
Child Care Assistant, *see* Early Childhood Educator....122
Child Care Worker, *see* Early Childhood Educator....122
Chinese Medicine Practitioner....201
Chiropodist, *see* Podiatrist....227
Chiropractor....224
Chocolatier, *see* Confectioner....260
Choreographer, *see* Dancer....98
Civil Celebrant....284
Civil Construction Worker....284
Civil Engineer....138
Cleaner....259
Clerk of Court, *see* Court Officer....195
Clerk, *see* Administrative Assistant....51
Climate Change Analyst....224
Clinical Audiometrist, *see* Audiometrist....169
Clinical Exercise Physiologist....224
Clinical Nurse Specialist, *see* Nurse - Registered....212
Clothing Patternmaker....285
Commis Chef, *see* Chef....259
Commissioning Editor, *see* Editor....72
Commodities Trader, *see* Financial Dealer and Broker....57
Community Celebrant, *see* Civil Celebrant....284
Community Constable, *see* Indigenous Community Liaison Officer....155
Community Dance Worker, *see* Dancer....98
Community Development Officer, *see* Community Worker....249
Community Engagement Officer, *see* Community Worker....249
Community Health Nurse, *see* Nurse - Registered....212
Community Pharmacist, *see* Pharmacist....216
Community Worker....249
Computer Engineer....81
Computer Programmer, *see* Programmer (Information Technology)....86
Computer Systems Analyst, *see* Analyst (Information Technology)....80
Computer Systems Auditor....82
Computer Systems Engineer, *see* Computer Engineer....81
Computer Systems Officer, *see* Analyst (Information Technology)....80
Computer Tester, *see* Analyst (Information Technology)....80
Concrete Worker, *see* Construction Worker....286
Concreter....285
Condensed Matter Physicist, *see* Physicist....243
Confectioner....260
Conference Coordinator, *see* Events Coordinator....263
Conservation Worker, *see* Landcare Worker....36

Conservator....186
Construction Engineer, *see* Civil Engineer....138
Construction Manager....44
Construction Worker....286
Consultant Pharmacist, *see* Pharmacist....216
Contemporary Dancer, *see* Dancer....98
Control Room Operator, *see* Radio Dispatcher....314
Convention Coordinator, *see* Events Coordinator....263
Conveyancer....286
Cook....260
Copywriter....71
Correctional Officer....154
Cosmologist, *see* Physicist....243
Cost Accountant, *see* Accountant....50
Counsellor....170
Courier, *see* Delivery Driver....288
Court Officer....195
Court Registrar, *see* Court Officer....195
Coxswain....261
Craftsperson....98
Crane Driver, *see* Crane Operator....287
Crane Operator....287
Creche Attendant, *see* Early Childhood Educator....122
Credit Officer (Lending/Loans Officer), *see* Bank Officer....53
Criminologist....186
Crop Farmer, *see* Farmer....33
Crop Physiologist, *see* Agricultural Scientist....28
Croupier, *see* Gaming Worker....264
Crowd Controller, *see* Security Officer....318
Cultural Development Officer, *see* Arts Administrator....95
Cultural Heritage Officer....187
Custodial Correctional Officer, *see* Correctional Officer....154
Customs Broker....55
Customs Officer, *see* Border Force Officer....153

D

Dance Teacher, *see* Dancer....98
Dance Therapist, *see* Dancer....98
Dancer....98
Data Analyst....287
Data and Telecommunications Cable Worker....82
Data Modeller, *see* Analyst (Information Technology)....80
Data Scientist , *see* Data Analyst....287
Database Administrator, *see* Information Technology Support Technician....85
Debt Collector....55
Deckhand....261
Delivery Driver....288
Demi Chef de Partie, *see* Chef....259
Dental Assistant....116
Dental Hygienist....116
Dental Nurse, *see* Dental Assistant....116
Dental Prosthetist, *see* Dentist....117
Dental Technician....117
Dentist....117
Dermatologist....201
Detection/Defence Dog Trainer, *see* Dog Trainer....335
Detective - Australian Federal Police, *see* Police Officer - Australian Federal Police....160
Detective, *see* Police Officer - State....161
Developmental Care Worker, *see* Disability Support Worker....172
Dietary Aide....171
Dietitian....171
Digital Marketing Specialist....71
Digital Printer....288

Director of Photography, *see* Film and Television Camera Operator....100
Disability Support Worker....172
Disabled Carer, *see* Disability Support Worker....172
District Aboriginal Liaison Officer, *see* Indigenous Community Liaison Officer....155
Diver....262
Diversional Therapist....172
DJ, *see* Media Presenter....74
Docker, *see* Waterside Worker....332
Doctor, *see* Medical Practitioner....202
Dog Care Worker, *see* Animal Attendant....335
Dog Trainer....335
Draftsperson, *see* Architectural Draftsperson....43
Driller's Assistant....289
Driller's Offsider, *see* Driller's Assistant....289
Driver Trainer, *see* Driving Instructor....289
Driving Instructor....289
Drug and Alcohol Counsellor, *see* Counsellor....170
Dry Cleaner....290

E

Early Childhood Educator....122
Earthmoving Labourer , *see* Building Labourer....279
Ecologist, *see* Environmental Scientist....31
eCommerce Business Owner....56
Econometrician, *see* Economist....56
Economist....56
Editor....72
Education Aide....123
Education Aide - Auslan, *see* Education Aide....123
Education Aide - Braille, *see* Education Aide....123
Education Assistant, *see* Education Aide....123
Education Support Staff, *see* Education Aide....123
Electrical Engineer....139
Electrical Linesperson....290
Electrical Powerline Tradesperson, *see* Electrical Linesperson....290
Electrician....291
Electronic Data Processing Auditor, *see* Computer Systems Auditor....82
Electronics and Communications Technician....291
Electronics Engineer....140
Electrotechnology Assembler, *see* Electronics and Communications Technician....291
Electrotechnology Technician, *see* Electronics and Communications Technician....291
Embalmer, *see* Funeral Attendant....297
Embryologist....202
Emergency Medicine Practitioner, *see* Medical Practitioner....202
Employee Relations Officer, *see* Workplace Relations Officer....67
Endodontist, *see* Dentist....117
Engine Reconditioner....292
Engineer - Aerospace, *see* Aerospace Engineer....136
Engineer - Biomedical, *see* Biomedical Engineer....233
Engineer - Chemical, *see* Chemical Engineer....137
Engineer - Civil, *see* Civil Engineer....138
Engineer - Electronics, *see* Electronics Engineer....140
Engineer - Environmental, *see* Environmental Engineer....141
Engineer - Marine, *see* Marine Engineer....142
Engineer - Petroleum, *see* Petroleum Engineer....147
Engineering Patternmaker, *see* Engineering Tradesperson - Fabrication....293
Engineering Technician - Mechanical, *see* Engineering Tradesperson - Mechanical....293
Engineering Tradesperson - Fabrication....293
Engineering Tradesperson - Mechanical....293
Enroute Controller, *see* Air Traffic Controller....255
Entrepreneur....57

Environmental Chemist, *see* Chemist....235
Environmental Economist, *see* Economist....56
Environmental Engineer....141
Environmental Field Officer, *see* Landcare Worker....36
Environmental Health Officer....30
Environmental Officer, *see* Environmental Scientist....31
Environmental Scientist....31
Environmentalist, *see* Environmental Scientist....31
Epidemiologist, *see* Statistician....245
Events Coordinator....263
Exercise Physiologist, *see* Exercise Scientist....173
Exercise Scientist....173

F

Facilities Officer....294
Family Celebrant, *see* Civil Celebrant....284
Family Counsellor, *see* Counsellor....170
Family Day Care Educator....123
Farm Hand....32
Farm Overseer, *see* Farmer....33
Farmer....33
Fashion Designer....99
Federal Agent, *see* Police Officer - Australian Federal Police....160
Federal Police Officer, *see* Police Officer - Australian Federal Police....160
Field Assistant, *see* Animal Technician....232
Fighter Pilot, *see* Air Force Officer....150
Film and Television Camera Operator....100
Film and Television Editor....100
Film and Television Floor Manager, *see* Stage Manager....111
Film and Television Lighting Operator....101
Film and Television Producer's Assistant....101
Film Star, *see* Actor....94
Film, Stage and Television Director....102
Finance Manager, *see* Accountant....50
Financial Adviser, *see* Financial Planner....58
Financial Dealer and Broker....57
Financial Economist, *see* Economist....56
Financial Market Broker, *see* Financial Dealer and Broker....57
Financial Market Dealer, *see* Financial Dealer and Broker....57
Financial Planner....58
Firefighter....155
Fisheries Observer, *see* Fisheries Officer....33
Fisheries Officer....33
Fisheries Technical Officer, *see* Aquaculture Technician....29
Fisheries Technician, *see* Aquaculture Technician....29
Fishing Inspector, *see* Fisheries Officer....33
Fitness Instructor....263
Fitter, *see* Engineering Tradesperson - Fabrication....293
Flight Attendant....264
Flight Data Officer, *see* Air Traffic Controller....255
Floor Finisher and Coverer....295
Floor Tiler, *see* Tiler - Wall and Floor....325
Florist....295
Food Process Worker....295
Food Scientist, *see* Food Technologist....237
Food Standards Officer, *see* Primary Products Inspector....312
Food Technician....236
Food Technologist....237
Footwear Worker....296
Forensic Accountant, *see* Accountant....50
Forensic Scientist....237
Forester....34
Forklift Driver, *see* Forklift Operator....296
Forklift Operator....296
Foundry Worker, *see* Engineering Tradesperson - Fabrication....293
Freight Forwarder, *see* Customs Broker....55
Fumigator, *see* Pest and Weed Controller....311
Functions Coordinator, *see* Events Coordinator....263
Funeral Attendant....297
Funeral Celebrant, *see* Civil Celebrant....284
Funeral Director, *see* Funeral Attendant....297
Funeral Director's Assistant, *see* Funeral Attendant....297
Furniture Maker, *see* Cabinetmaker....280
Furniture Removalist....297

G

Gaffer, *see* Film and Television Lighting Operator....101
Games Developer....83
Gaming Machine Worker, *see* Gaming Worker....264
Gaming Worker....264
Garbage Collector....298
Gatekeeper, *see* Security Officer....318
General Practitioner, *see* Medical Practitioner....202
Genetic Counsellor, *see* Counsellor....170
Geochemist, *see* Chemist....235
Geographic Information Systems Officer....83
Geological Engineer....238
Geologist....239
Geomatic Engineer, *see* Surveyor....46
Geophysicist....240
Geoscientist, *see* Geologist....239
Glass and Glazing Tradesperson....298
Government Pharmacist, *see* Pharmacist....216
GP, *see* Medical Practitioner....202
Graphic Designer....102
Growth Manager....58
Groundsperson, *see* Horticultural Tradesperson....300
Guide Dog Mobility Instructor....336
Gunsmith, *see* Engineering Tradesperson - Fabrication....293
Gym Instructor, *see* Fitness Instructor....263

H

Hairdresser....299
Hardware Design Engineer, *see* Computer Engineer....81
Hat Maker, *see* Milliner....306
Hazardous Materials/Dangerous Goods Safety Officer, *see* Occupational Health and Safety Officer....178
Health Informatician, *see* Health Information Manager....174
Health Information Manager....174
Health Inspector, *see* Environmental Health Officer....30
Health Promotion Practitioner....174
Health Surveyor, *see* Environmental Health Officer....30
Hearing Aid Audiometrist, *see* Audiometrist....169
Heavy Vehicle Motor Mechanic....299
Help Desk Operator, *see* Information Technology Support Technician....85
Herbalist, *see* Natural Therapist....177
High School Teacher, *see* Teacher - Secondary....129
Highway Engineer, *see* Civil Engineer....138
Historian....187
Home Care Worker, *see* Aged Care Worker....167
Home Care Worker, *see* Disability Support Worker....172
Home Support Worker, *see* Disability Support Worker....172
Homeopath, *see* Natural Therapist....177
Horse Trainer....336
Horticultural Assistant....35
Horticultural Scientist, *see* Agricultural Scientist....28
Horticultural Technical Officer, *see* Agricultural Scientist....28
Horticultural Tradesperson....300
Horticulturist, *see* Horticultural Tradesperson....300

Hospital Administrator....175
Hospital Pharmacist, *see* Pharmacist....216
Hospital Porter, *see* Ward Assistant....181
Hotel and Motel Front Office Attendant....265
Hotel Concierge, *see* Hotel and Motel Front Office Attendant....265
Housekeeper, *see* Cleaner....259
Housekeeper, *see* Room Attendant....268
Human Resources Officer....59
Hydrologist....36

I

Illustrator....103
Importer and Exporter....59
Indigenous Community Liaison Officer....155
Industrial Designer....104
Industrial Engineer....141
Industrial Pharmacist, *see* Pharmacist....216
Industrial Relations Officer, *see* Workplace Relations Officer....67
Industrial Screening Audiometrist, *see* Audiometrist....169
Industrial/Production Chemist, *see* Chemist....235
Information Security Analyst....84
Information Systems Auditor, *see* Computer Systems Auditor....82
Information Technology (IT) Hardware Technician, *see* Computer Engineer....81
Information Technology Administrator....84
Information Technology Strategist, *see* Systems Designer (Information Technology)....88
Information Technology Support Technician....85
Instrument Fitter....300
Instrumentation Tradesperson....301
Insurance Agent....60
Insurance Broker....61
Insurance Officer....61
Integrated Rating....301
Intellectual Disability Services Officer, *see* Disability Support Worker....172
Intelligence Analyst....156
Intensive Care Medicine Practitioner, *see* Medical Practitioner....202
Interior Decorator....105
Interior Designer....105
International/Overseas Officer, *see* Bank Officer....53
Interpreter....188
Inventory and Supply Officer....302
Investment Adviser, *see* Financial Planner....58
Investment Analyst, *see* Accountant....50
Investment Banker/Merchant Banker, *see* Financial Dealer and Broker....57

J

Jazz Dancer, *see* Dancer....98
Jeweller....106
Jockey....266
Journalist....72
Judge, *see* Lawyer....196

K

Kennel Hand, *see* Animal Attendant....335
Kindergarten Teacher, *see* Teacher - Early Childhood....125
Kinesiologist, *see* Natural Therapist....177
Kitchen Hand....266

L

Laboratory Assistant, *see* Laboratory Worker....240
Laboratory Technician, *see* Laboratory Worker....240
Laboratory Worker....240
Labour Market Economist, *see* Economist....56
Land Information Systems Officer, *see* Geographic Information Systems Officer....83
Landcare Worker....36
Landscape Architect....45
Law Clerk....195
Lawyer....196
Leather Goods Maker....302
Leather Worker, *see* Leather Goods Maker....302
Legal Executive, *see* Law Clerk....195
Lettercutter, *see* Stonemason....321
Librarian....188
Lifeguard....267
Lift Electrician, *see* Lift Mechanic....303
Lift Mechanic....303
Light Engine Mechanic....303
Lighting Designer, *see* Film and Television Lighting Operator....101
Lineworker, *see* Electrical Linesperson....290
Linguistic Anthropologist, *see* Anthropologist....184
Liquidator and Receiver, *see* Accountant....50
Livestock Farmer, *see* Farmer....33
Local Government Inspector....156
Locksmith....304
Logistics Clerk....304

M

Machine Learning Engineer....85
Machine Operator (Non-metal Products)....305
Magistrate, *see* Lawyer....196
Make-up Artist....106
Management Consultant....61
Marine Biologist....241
Marine Ecologist, *see* Marine Biologist....241
Marine Engineer....142
Marine Officer, *see* Fisheries Officer....33
Marine Surveyor....305
Maritime Engineer, *see* Naval Architect....146
Market Research Analyst, *see* Market Researcher....73
Market Research Interviewer, *see* Market Researcher....73
Market Researcher....73
Marketer, *see* Marketing Officer....74
Marketing Officer....74
Marriage Celebrant, *see* Civil Celebrant....284
Marriage Counsellor, *see* Counsellor....170
Massage Therapist....175
Masseur/Masseuse, *see* Massage Therapist....175
Materials Engineer....143
Mathematician....242
Meat Processing Worker....306
Meat Worker, *see* Meat Processing Worker....306
Meatworker, *see* Meat Processing Worker....306
Mechanical Engineer....143
Mechanical Engineering Associate....144
Mechanical Engineering Technician, *see* Engineering Tradesperson - Mechanical....293
Mechanical Engineering Tradesperson, *see* Engineering Tradesperson - Mechanical....293
Mechatronic Engineer....144
Media Planner, *see* Advertising Account Executive....51
Media Presenter....74
Mediator, *see* Counsellor....170

Medical Administrator, *see* Medical Practitioner....202
Medical Imaging Technologist....176
Medical Laboratory Technician....177
Medical Physicist, *see* Physicist....243
Medical Practitioner....202
Medical Scientist....203
Meetings and Events Manager, *see* Events Coordinator....263
Member of Parliament, *see* Parliamentarian....159
Mental Health Nurse....210
Metal Fabricator, *see* Engineering Tradesperson - Fabrication....293
Metal Machinist, *see* Engineering Tradesperson - Fabrication....293
Metallurgical Engineer, *see* Chemical Engineer....137
Metallurgist....145
Meteorologist....242
Microbiological Engineer, *see* Chemical Engineer....137
Microbiologist....243
Midwife....211
Milliner....306
Miner....307
Mining Engineer....145
Mobile Plant Operator....307
Model....107
Model Maker....107
Molecular Biologist, *see* Biochemist....233
Motor Control and Learning Specialist, *see* Exercise Scientist....173
Motor Mechanic - Car....308
Moulder/Coremaker, *see* Engineering Tradesperson - Mechanical....293
Movie Director, *see* Film, Stage and Television Director....102
Movie Star, *see* Actor....94
MRI Radiographer, *see* Medical Imaging Technologist....176
Multimedia Developer....75
Municipal Engineer, *see* Civil Engineer....138
Museum Attendant....189
Museum Curator....189
Museum Officer....190
Music Critic, *see* Journalist....72
Music Therapist....108
Musician....108
Musicologist, *see* Musician....108
Musterer, *see* Farmer....33
Myotherapist, *see* Massage Therapist....175

N

Nail Technician....308
Nanny....309
Nanotechnologist, *see* Physicist....243
Natural Resource Manager....37
Natural Therapist....177
Naturopath, *see* Natural Therapist....177
Naval Architect....146
Navy Officer....157
Navy Sailor....158
Network Administrator, *see* Information Technology Support Technician....85
Network Analyst, *see* Analyst (Information Technology)....80
Network/Systems Engineer, *see* Computer Engineer....81
News Reader, *see* Media Presenter....74
Non-destructive Testing Technician....310
Nuclear/Particle Physicist, *see* Physicist....243
Nurse - Enrolled....212
Nurse - Registered....212
Nurse Educator, *see* Nurse - Registered....212
Nurse Practitioner, *see* Nurse - Registered....212
Nurse Researcher, *see* Nurse - Registered....212
Nursing Assistant (Aged Care), *see* Aged Care Worker....167
Nursing Assistant (Disability Support), *see* Disability Support Worker....172
Nutritionist....178

O

Obstetrician and Gynaecologist....204
Occupational and Environmental Medicine Practitioner, *see* Medical Practitioner....202
Occupational Health and Safety Coordinator, *see* Occupational Health and Safety Officer....178
Occupational Health and Safety Officer....178
Occupational Health and Safety Trainer, *see* Occupational Health and Safety Officer....178
Occupational Therapist....225
Occupational/Industrial Hygienist, *see* Occupational Health and Safety Officer....178
Ocean Engineer, *see* Naval Architect....146
Oenologist, *see* Winemaker....39
Office Cashier, *see* Cashier....283
Offshore Engineer, *see* Naval Architect....146
Online Merchant , *see* eCommerce Business Owner....56
Operating Theatre Technician....179
Operations Researcher, *see* Research Officer....244
Operations Systems Analyst, *see* Analyst (Information Technology)....80
Operations/Accounts Officer, *see* Bank Officer....53
Ophthalmologist, *see* Medical Practitioner....202
Optical Physicist, *see* Physicist....243
Optometrist....226
Oral and Maxillofacial Surgeon....118
Oral Health Therapist....119
Orderly, *see* Ward Assistant....181
Organic Chemist, *see* Chemist....235
Orthodontist....119
Orthopaedic Surgeon, *see* Surgeon....206
Orthoptist....204
Osteopath....226

P

Paediatric Dentist, *see* Dentist....117
Paediatrician and Child Health Practitioner, *see* Medical Practitioner....202
Pain Medicine Practitioner, *see* Medical Practitioner....202
Painter (Fine/Visual Arts), *see* Artist....95
Painter and Decorator....310
Palliative Medicine Practitioner, *see* Medical Practitioner....202
Panel Beater....310
Paralegal, *see* Law Clerk....195
Paramedic....205
Park Ranger....158
Parliamentarian....159
Pathologist, *see* Medical Practitioner....202
PE Teacher, *see* Teacher - Physical Education....127
Performance/Live Art Artist, *see* Artist....95
Performer, *see* Actor....94
Periodontist, *see* Dentist....117
Permaculturalist, *see* Horticultural Tradesperson....300
Personal Assistant....62
Personal Care Worker (Aged Care), *see* Aged Care Worker....167
Personal Trainer, *see* Fitness Instructor....263
Pest and Weed Controller....311
Pest Management Technician, *see* Pest and Weed Controller....311
Pet Groomer, *see* Animal Attendant....335
Pet Shop Attendant, *see* Animal Attendant....335
Petroleum and Gas Process Operator, *see* Chemical Plant Operator....283

Petroleum Engineer 147
Pharmacist....216
Pharmacologist....216
Phlebotomist, *see* Medical Practitioner 202
Photographer....109
Physical Chemist, *see* Chemist....235
Physician, *see* Medical Practitioner....202
Physicist....243
Physiotherapist....227
Piercer, *see* Body Artist....96
Pilot....148
Plastic Surgeon, *see* Surgeon....206
Platform Engineer....86
Plumber....311
Podiatrist....227
Point-Of-Sale operator, *see* Cashier....283
Police Liaison Officer, *see* Indigenous Community Liaison Officer....155
Police Officer - Australian Federal Police....160
Police Officer - State....161
Pool Attendant, *see* Lifeguard....267
Postal Employee....161
Poultry Technical Officer, *see* Agricultural Scientist....28
Practice Nurse, *see* Nurse - Enrolled....212
Pre-primary School Teacher, *see* Teacher - Early Childhood....125
Primary Products Inspector....312
Print Finisher, *see* Binder and Finisher....278
Printer, *see* Digital Printer....288
Printmaker, *see* Artist....95
Prison Officer, *see* Correctional Officer....154
Private Detective, *see* Private Investigator....197
Private Eye, *see* Private Investigator....197
Private Investigator....197
Probation and Parole Officer....162
Process Plant Operator (Oil and Gas)....313
Process Technician, *see* Chemical Plant Operator....283
Product Assembler....313
Production Assistant, *see* Film and Television Producer's Assistant....101
Production Crew Member....109
Production Horticulturist, *see* Horticultural Tradesperson....300
Programmer (Information Technology)....86
Proofreader, *see* Editor....72
Property Manager....62
Prosthetist/Orthotist....206
Prosthodontist, *see* Dentist....117
Protectives Service Officer, *see* Security Officer....318
Psychiatrist, *see* Medical Practitioner....202
Psychologist....220
Public Health Dentist, *see* Dentist....117
Public Health Medicine Practitioner, *see* Medical Practitioner....202
Public Relations Officer....75
Public Servant - Australian Public Service....163
Public Servant - State Government....163
Purchasing and Supply Logistics Clerk, *see* Logistics Clerk....304

Q

Quality Assurance Inspector....314
Quality Control Officer, *see* Quality Assurance Inspector....314
Quantity Surveyor....45
Quarantine Inspector, *see* Primary Products Inspector....312

R

RAAF Officer, *see* Air Force Officer....150
RAAF Technical and Trade, *see* Air Force Trades....151
Radiation Oncologist, *see* Medical Practitioner....202
Radiation Therapist....179
Radio Announcer, *see* Media Presenter....74
Radio Dispatcher....314
Radio or Television Director, *see* Film, Stage and Television Director....102
Radiographer, *see* Medical Imaging Technologist....176
Radiologist, *see* Medical Practitioner....202
Railway Engineer, *see* Civil Engineer....138
Railway Infrastructure Worker....315
Real Estate Salesperson....63
Receptionist....267
Records Officer....63
Recreation Officer....124
Recruiter, *see* Recruitment Consultant....64
Recruitment Consultant....64
Refrigeration and Air Conditioning Draftsperson....315
Refrigeration and Air Conditioning Mechanic....316
Rehabilitation Counsellor....228
Rehabilitation Medicine Practitioner, *see* Medical Practitioner....202
Renderer, *see* Meat Processing Worker....306
Reporter, *see* Journalist....72
Repossession Agent, *see* Debt Collector....55
Research Chemist, *see* Chemist....235
Research Officer....244
Residential Care Worker, *see* Aged Care Worker....167
Resource Economist, *see* Economist....56
Restaurant Manager, *see* Caterer....258
Retail Buyer....268
Rigger....316
Road Infrastructure Worker, *see* Civil Construction Worker....284
Road Worker, *see* Civil Construction Worker....284
Roadie, *see* Production Crew Member....109
Robotics Engineer....87
Robotics Technician, *see* Robotics Engineer....87
Roofer....317
Roofing Plumber....317
Room Attendant....268
Rubber Processor....318

S

Saddler, *see* Leather Goods Maker....302
Sales Assistant....269
Sales Representative....65
SAS Soldier, *see* Air Force Officer....150
School Learning Support Officer, *see* Education Aide....123
Science Field Officer....245
Sculptor/Installation Artist, *see* Artist....95
Secretary....65
Security Guard, *see* Security Officer....318
Security Officer....318
Security System Technician....319
Senior Sub-editor, *see* Editor....72
SEO Specialist....76
SEO Specialist, *see* Digital Marketing Specialist....71
Service Station Cashier, *see* Cashier....283
Set Designer....110
Sexual Health Medicine Practitioner, *see* Medical Practitioner....202
Sharebroker, *see* Financial Dealer and Broker....57
Shearer....37
Sheetmetal Worker (Light Fabrication), *see* Engineering Tradesperson - Fabrication....293
Sheriff, *see* Court Officer....195
Ship's Captain, *see* Ship's Officer....319
Ship's Engineer, *see* Marine Engineer....142
Ship's Mate, *see* Ship's Officer....319
Ship's Officer....319

Shipwright....320
Shoemaker, *see* Footwear Worker....296
Shot Firer, *see* Shotfirer....320
Shotfirer....320
Signmaker....110
Signwriter, *see* Signmaker....110
Site Reliability Engineer....87
Slaughterer, *see* Meat Processing Worker....306
Social Media Coordinator , *see* Social Media Manager....77
Social Media Manager....77
Social Worker....250
Social/Cultural Anthropologist, *see* Anthropologist....184
Sociologist....190
Soft Tissue Therapist, *see* Massage Therapist....175
Software Developer....88
Software Engineer, *see* Computer Engineer....81
Soil Scientist, *see* Agricultural Scientist....28
Soldier, *see* Army Soldier....152
Solicitor, *see* Lawyer....196
Solid Plasterer....321
Solutions Architect, *see* Systems Designer (Information Technology)....88
Sonographer, *see* Medical Imaging Technologist....176
Sound Engineer, *see* Sound Technician....111
Sound Technician....111
Sous Chef/Second Chef, *see* Chef....259
Spare Parts Salesperson, *see* Automotive Parts Interpreter....
Spatial Information Systems Officer, *see* Geographic Information Systems Officer....83
Spatial Information Systems Technician, *see* Cartographic Technician....235
Special Care Worker, *see* Disability Support Worker....172
Special Needs Dentist, *see* Dentist....117
Speech Pathologist....229
Speech Therapist, *see* Speech Pathologist....229
Sport and Exercise Medicine Physician, *see* Medical Practitioner....202
Sports Administrator....269
Sports Biomechanist, *see* Exercise Scientist....173
Sports Coach....270
Sports Scientist, *see* Exercise Scientist....173
Sports Therapist, *see* Massage Therapist....175
Sportsperson....271
Spray Painter, *see* Vehicle Painter....331
Stablehand....38
Stage Designer, *see* Set Designer....110
Stage Manager....111
Stagehand, *see* Theatre Mechanist....113
State Public Servant, *see* Public Servant - State Government....163
Station Hand, *see* Farm Hand....32
Statistician....245
Stevedore, *see* Waterside Worker....332
Stock and Station Agent....66
Stock Clerk, *see* Inventory and Supply Officer....302
Stockbroker, *see* Financial Planner....58
Stone Fixer, *see* Stonemason....321
Stonemason....321
Storeperson....322
Stunt Actor, *see* Stunt Performer....112
Stunt Performer....112
Sub-editor, *see* Editor....72
Surgeon....206
Surveying Technologist, *see* Geographic Information Systems Officer....83
Surveyor....46
Sustainability Officer....38
Sustainability Specialist....38
Swimming Pool and Spa Builder....322
Swimming Pool and Spa Inspector, *see* Swimming Pool and Spa Technician....323
Swimming Pool and Spa Technician....323
Systems Accountant, *see* Accountant....50
Systems Administrator, *see* Information Technology Support Technician....85
Systems Analyst, *see* Analyst (Information Technology)....80
Systems Designer (Information Technology)....88
Systems Engineer, *see* Systems Designer (Information Technology)....88

T

TAFE Teacher, *see* Vocational Education and Training (VET) Lecturer....132
Tattooist, *see* Body Artist....96
Taxation Consultant/Taxation Agent, *see* Accountant....50
Taxation Economist, *see* Economist....56
Taxi Driver, *see* Car Driver....281
Taxidermist....323
Teacher - Art....125
Teacher - Early Childhood....125
Teacher - English as a Second Language....126
Teacher - Music....127
Teacher - Physical Education....127
Teacher - Primary....128
Teacher - Secondary....129
Teacher - Special Education....130
Teacher - Technical and Further Education (TAFE), *see* Vocational Education and Training (VET) Lecturer....132
Teacher Assistant, *see* Education Aide....123
Teacher's Aide, *see* Education Aide....123
Technical and Further Education Lecturer, *see* Vocational Education and Training (VET) Lecturer....132
Technical Program Manager....89
Technical Teacher, *see* Vocational Education and Training (VET) Lecturer....132
Telecommunications Engineer....148
Telecommunications Field Engineer, *see* Telecommunications Engineer....148
Telecommunications Line and Cable Worker, *see* Cable Jointer....281
Telecommunications Network Planner and Designer, *see* Telecommunications Engineer....148
Telecommunications Optical Network Specialist, *see* Telecommunications Engineer....148
Telecommunications Technician....324
Telephone Consultant (Banking), *see* Bank Officer....53
Television Presenter, *see* Media Presenter....74
Teller, *see* Bank Officer....53
Terminal Area Controller, *see* Air Traffic Controller....255
Textile Designer....112
Textile Mechanic....324
Theatre Mechanist....113
Theatrical Director, *see* Film, Stage and Television Director....102
Therapy Aide....180
Tiler - Wall and Floor....325
Timber and Wood Production Worker....325
Tissue Culture Technician....246
Tool and Die Setter....326
Toolmaker, *see* Engineering Tradesperson - Mechanical....293
Tour Guide....271
Tourist Adviser, *see* Tourist Information Officer....272
Tourist Information Officer....272
Tower Controller, *see* Air Traffic Controller....255
Town Planner, *see* Urban and Regional Planner....46
Toxicologist....207
Track Rider....272
Trade Measurement Officer....326
Trade Union Official....327
Train and Network Controller....327
Train Driver....328

Training Officer 131
Translator 191
Transport Administrator 328
Transport Clerk 329
Transport Economist, *see* Economist 56
Travel Consultant 273
Treasurer, *see* Accountant 50
Tree Surgeon, *see* Horticultural Tradesperson 300
Truck Driver 329
Turner, *see* Engineering Tradesperson - Mechanical 293
Tutor 131
TV Director, *see* Film, Stage and Television Director 102
Tyre Fitter and Repairer 330

U

UI/UX Designer 89
Union Organiser, *see* Trade Union Official 327
University Lecturer 132
Upholsterer 330
Urban and Regional Planner 46

V

Valuer 66
Vehicle Body Builder 331
Vehicle Painter 331
VET Lecturer, *see* Vocational Education and Training (VET) Lecturer 132
Veterinarian 337
Veterinary Nurse 338
Video Game Designer/Developer 90
Vineyard Hand, *see* Winery Worker 274
Vineyard Manager, *see* Viticulturist 39
Visitor Information Officer, *see* Tourist Information Officer 272
Visual Artist, *see* Artist 95
Visual Merchandiser 113
Visual Stylist, *see* Visual Merchandiser 113
Viticulturist 39
Vocational Education and Training (VET) Lecturer 132

W

Waiter 273
Wall and Ceiling Liner 331
Ward Assistant 181
Water Resources Engineer, *see* Civil Engineer 138
Water Treatment Engineer, *see* Chemical Engineer 137
Waterside Worker 332
Weather Forecaster, *see* Meteorologist 242
Web Developer 90
Weights and Measures Inspector, *see* Quality Assurance Inspector 314
Weights and Measures Inspector, *see* Trade Measurement Officer 326
Welder - First Class, *see* Engineering Tradesperson - Fabrication 293
Welfare Worker 250
Wellness Coach, *see* Wellness Officer 181
Wellness Consultant, *see* Wellness Officer 181
Wellness Officer 181
Wet Plasterer, *see* solid plasterer 321
Wharf Labourer, *see* Waterside Worker 332
Window Cleaner, *see* cleaner 259
Window Dresser, *see* Visual Merchandiser 113
Winemaker 39
Winery Worker 274
Workplace Relations Officer 67
Writer 191

Y

Youth Worker 251

Z

Zookeeper, *see* Zoologist 338
Zoologist 338

You are now leaving *The Good Careers Guide*

Flip this book to check out *The Good Universities Guide* and learn about university options, scholarships, fees and course selection.