

Guide to Defence Industry Careers



Contents

Introduction

- What is defence industry?
- Why is it in demand?
- Benefits of working in defence industry
- Fact or Fiction!

Will a Defence Industry Career Suit Me?

- Strengths, Subjects & Interests
- Current Defence Projects
- Rewarding Roles, Competitive Pay

Defence Industry Pathways

- Entry Points
- Entry Programs
- Industry Scholarships

Occupation Profiles

- Role-Specific Pathways
- Role-Specific Profiles

Ready to Explore More?

- Where is this career headed?
- Defence Academy
- Year13 Industry Hub

Further Resources

- Defence SA
- ADF Careers
- Skills Road Quiz

DISCLAIMER

The details provided in this guide are accurate at the time of publication but subject to change without warning. Refer to relevant websites for updated details. Published July 2025 © Career Tools



Introduction

Ever wondered who builds submarines, designs the tech behind drones, or codes the systems that protect Australia from cyber threats? That's the world of defence industry – and it's full of diverse, exciting, future-focused careers waiting for people like you.

Whether you're into hands-on trades or solving real-world problems, defence industry offers rewarding jobs, cutting-edge projects and the chance to make a real impact. Throughout this guide, we will explore what the industry is all about, why it's in demand, the types of jobs involved and most importantly, how you can get started.

What is Defence Industry?

Defence industry is made up of people, businesses and organisations that help design, build and maintain the tools and technology that protect Australia. This includes everything from submarines and aircraft to cybersecurity systems and AI.

Protecting Australia is a team effort – involving the Australian Defence Force (ADF), government and the private companies that make up defence industry. By investing in innovation, infrastructure and skilled workers, this collaboration plays a vital role in strengthening national security now and into the future.

Defence Industry vs. ADF

It's important to know that defence industry is not the same as the Australian Defence Force (ADF). While the ADF includes the Army, Navy, and Air Force – the people in uniform – defence industry is made up of civilians and companies who support them. For example, it's the engineers, technicians, manufacturers, cyber experts, and project teams who develop and support what the ADF needs to do their job. Although they are closely related, defence industry & ADF are two different career paths.

ADF



- Provides support during emergencies
- Operates equipment and systems during missions
- Has three branches
- Is a single employer
- Has physical fitness requirements
- May expect you to deploy overseas

DEFENCE INDUSTRY



- Supplies, builds, tests and maintains equipment
- Are many employers rather than one
- Contains several different sub-industries to one common purpose
- Recruits and operates in a similar way to other civilian jobs as any other civilian company

Introduction

In-demand!

The world is changing fast – and so are the challenges we face. With rising cyber threats, advancements in drone and AI technology and Australia's role in global peacekeeping efforts, there's a growing need for skilled professionals in all areas of defence industry.

From building military equipment and maintaining vehicles, to developing secure software and managing supply chains, the demand for talented people across defence sectors has never been greater. In fact, the industry has added nearly 4,000 new jobs, driven by initiatives like the [AUKUS submarine program](#) and [missile production projects](#).

Choosing a career in defence industry means you are in-demand:

- National security is a top priority.
- Massive investment in homegrown capabilities.
- Big projects like shipbuilding and cyber defence need large workforces.
- Tech advancements mean constant innovation and learning.
- Jobs are stable, future-focused, and meaningful.

What makes it unique?

Thousands of jobs are being created in the industry over the next 10 years to support multi-million and billion dollar projects in shipbuilding, aerospace, cyber and more.

This provides a unique opportunity for students who are interested in trades or STEM careers to step into high-demand roles. There are options to work anywhere in Australia, from high-tech hubs in Adelaide to naval bases in WA or the NT.

You could work for some of the biggest defence companies in the world, benefit from subsidised education and training and use your skills to support Australia's safety and future.



*Our critical national defence projects, including nuclear-powered submarines, will be delivered with the strength of a **highly educated, highly trained** workforce with the cutting edge skills and capabilities of the future”.*

South Australian Premier, Peter Malinauskas (2023)

Benefits of working in the Defence

A job in defence industry means being part of something bigger – using your skills to help protect Australia while collaborating with expert teams. It offers well-paid, future-ready careers where you can grow, learn and make a real impact. With constant innovation, new systems and technologies, it's a secure and exciting field that's always moving forward.



Job Security

Defence industry is a government-backed, long-term industry. With billions invested in national projects, jobs are stable and secure for the future.



Earn While You Learn

Many roles offer paid apprenticeships and traineeships, meaning you get qualified, gain experience, and start earning – all at the same time. In the 12 months leading up to January 2025, defence industry salaries increased by an average of 1.8%.



Cutting Edge Technology

You'll work with state-of-the-art tools and innovations, from AI and robotics to cybersecurity and naval engineering – often before they reach the general market.



Global Opportunities

Australia partners with some of the world's largest defence companies (like BAE, Lockheed Martin and Boeing), opening the door to international careers.



Meaningful – Purpose Driven Work

Your job directly contributes to national safety and global peacekeeping. It's more than just a job – it's work with impact.



Multiple Career Pathways

Whether you're into trades, tech, STEM, or logistics, defence industry offers diverse career options and entry points – from VET to university and beyond.

Defence Fact or Fiction?

You have to be in the military to work in defence industry.

Fiction!

Explanation: Many people in defence industry are civilians working in engineering, IT, cybersecurity, logistics and manufacturing roles. You can work in defence industry without joining the ADF.



All defence industry jobs involve manual labour.

Fiction!

Explanation: Many roles are highly technical, involving problem-solving, research, design and cutting-edge digital technologies.



South Australia is a major hub for defence jobs in Australia

Fact!

Explanation: SA is home to Osborne Naval Shipyard, advanced manufacturing facilities and cyber technology hubs - making it a key location for defence careers.



Defence Fact or Fiction?

You need a university degree to work in defence industry.

Fiction!

Explanation: While some roles require a degree, many jobs are available through VET, TAFE, apprenticeships, or traineeships.



Defence industry includes jobs in cybersecurity and software development.

Fact!



Explanation: Modern defence relies heavily on tech – roles in coding, cyber intelligence and IT security are in high demand.

The defence industry is only for men.

Fiction!

Explanation: Defence industry values diverse perspectives and skills – it's a sector for everyone. No matter your background or gender, you're encouraged and welcome. Solving complex global challenges takes all kinds of people, working together.



Would It Suit Me?

Do you enjoy working with others to solve real-world challenges? Are you curious, hands-on, or tech-savvy? If you tend to notice the little details that others miss, or simply love fixing things, why not put those skills to work in defence industry?

Check out the subjects and interests you're already exploring – they could be the first step toward your future role!

Science

Broad foundation for research and development, aerospace and sustainability roles.

Design & Technology

Useful for fabrication, mechanics and precision machining.

Automotive, Metalwork or Woodwork

Great stepping stones for apprenticeships in shipbuilding, welding and electronics.

VET/TAFE Subjects

Ideal for Construction, Electrotechnology, Engineering Pathways and Logistics.

Business & Economics

Valuable for roles in logistics, manufacturing, finance and project coordination.

English & Communication

Important for teamwork, reporting, presentations and leadership.

Geography & Modern History

Helpful in intelligence and security roles.

Physics & Chemistry

Great for careers in engineering, weapons systems and material sciences.

Mathematics Methods or Specialist Maths

Useful in nearly every defence role, especially for data analysis and design.

Digital Technologies / IT

Leads into cyber security, software development and systems engineering.

Real Projects, Real Impact

Defence industry is home to some of the most unique projects in the country. From manufacturing on the large scale, producing advanced military equipment, or designing next-gen cyber defence systems, you can get involved in exciting opportunities almost anywhere, any time.

Check out what's happening across the country right now!

WESTERN AUS

Shipbuilding Electrician

Project Example: [Henderson Defence Precinct Expansion](#)

Location: Henderson, WA

QUEENSLAND

Aerospace & Aviation

Project Example: [Loyal Wingman / MQ-28A Ghost Bat](#)

Location: Developed in Queensland by Boeing Australia

SOUTH AUS

Marine Systems Engineer

Project Example: [Hunter Class Frigate Program](#)

Location: Osborne Naval Shipyard, South Australia

SOUTH AUS

QUEENSLAND

Advanced Manufacturing

Project Example: [Guided Weapons and Explosive Ordnance \(GWEO\) Enterprise](#)

Location: South Australia & Queensland

NORTHERN TERRITORY

Construction Supervisor

Project Example: [RAAF Base Tindal Redevelopment](#)

Location: Katherine, NT

AUSTRALIAN CAPITAL TERRITORY

Cyber & Intelligence

Project Example: [Australian Cyber Security Centre \(ACSC\)](#)

Location: Canberra, ACT (within the Australian Signals Directorate)

NATIONWIDE

Administration & Logistics

Project Example: [Shipbuilding Logistics Coordinator](#)

Location: Coordinating delivery of equipment nationwide.

CT & Software

Project Example: [Defence One ERP System](#)

Location: Nationwide implementation by the Department of Defence

Rewarding Roles, Competitive Pay

Whether you're into a hands-on role like a technician, or interested in a specialised field such as cybersecurity, there's plenty of variety within the defence industry. No matter the path, every role is rewarding—and the pay is competitive too. Salary ranges are indicative and may vary depending on factors such as experience level, job location and employer.

Role	Estimated Salary Range (AUD)	Details	Potential Employer
Engineers	\$80,000 – A\$140,000	Mechanical, civil, aerospace, systems, mechatronics and electrical engineers help design, improve and manufacture defence materials.	BAE Systems Australia . Benefits include access to over 500 e-learning courses, flexible working, additional paid leave.
Cybersecurity Analysts	\$85,000 – \$120,000	Monitor, detect and respond to security breaches. Protect defence data and systems from cyber threats and attacks.	Nova Systems . Benefits include structured mentoring programs and professional development opportunities across technology fields.
Technicians & Trades	\$74,000 – \$113,000	Maintain and construct vehicles, electronics, and infrastructure. Build and maintain gear and machinery.	Babcock . Benefits include flexible start and finish times, discount programs and study leave.
Software Developers	\$75,000 – \$125,000	Create and manage the digital tools and platforms used in modern defense systems. Build defence apps and AI systems.	Lockheed Martin Australia . Benefits include access to a variety of learning platforms and flexible work arrangements.
Intelligence Officers	\$90,000 – \$105,000	Gather, interpret, and act on information to inform strategy, make smart decisions and protect assets.	Northrop Grumman Australia . Benefits include access to health insurance and wellness programs. Competitive salaries with performance-based incentives.
Logistics Coordinators	\$78,000 – \$98,000	Make sure gear and people get to where they need to go. Ensure the timely and secure movement of equipment, parts and personnel.	Raytheon Australia . Benefits include employee discount packages and structured career development.
Project Managers	\$133,660 – \$155,000	Lead teams in the delivery of complex, long-term defence initiatives.	ASC Pty Ltd . Benefits include apprenticeships, international opportunities and Corporate Graduate Program.

Defence Industry Pathways

There's no one way in – defence industry supports lots of entry points, whether you're heading to TAFE, Uni or straight into work.

1

Vocational Education & Training (VET) / TAFE

VET courses (like Certificates and Diplomas) are offered at TAFE and other training providers. They're hands-on, job-focused and often part of apprenticeships or traineeships.

- Great for trades or hands-on defence careers like welding, logistics, or electrotechnology.
- Courses are shorter (months to 2 years).
- Open to most students, no ATAR needed.



Tip: Look for degrees that include internships or graduate programs for real-world experience.

University

2

Higher Education means studying a degree at university – like an associate (2 years), bachelor's (3–4 years) degree.

- Considering defence industry careers in engineering, software, cybersecurity, or project management.
- Planning to study degrees like Engineering, IT, Physics, Data Science, or International Relations including degree apprenticeship such as [Flinders' University Advanced Manufacturing](#) or [UniSA's Software Engineering programs](#).
- Enjoy academic learning with technical or global impact.

3

Apprenticeships & Traineeships

Apprenticeships and traineeships are hands-on, paid training programs that let you learn a skill while you work. They're a great way to start your defence industry career without going straight to university.

- Keen to start working and earning straight after school.
- Like learning in a structured, job-based setting.
- Interested in defence industry trades like shipbuilding or electronics – the [Defence Industry Pathways Program](#) is a perfect first step.

Defence Industry Pathways



1

School Based Programs

School-based programs are learning opportunities that you can do while still at school (usually in Years 10–12) that help you gain skills, experience and qualifications in a real industry — like defence industry.

- STEM Outreach Programs
- Run by organisations like Defence SA, DSTG (Defence Science & Technology Group) and defence companies
- Includes workshops, competitions, and camps focused on:
 - Robotics
 - Drones
 - Cybersecurity
 - Engineering design challenges

1

Graduate Programs

Graduate programs are structured job programs designed for students who have finished a university degree and are ready to start their career.

They're commonly offered by:

- The Department of Defence
- Large defence contractors (like Babcock and BAE Systems)
- Government science and technology agencies (like DSTG)



Tip: While you're still at school, explore STEM subjects and career pathways that could lead to a uni degree in a defence industry-related field — and one day, a graduate program!

Industry Scholarships

There are several scholarships and programs across Australia designed to provide financial support and practical experience, helping you build a career in Australia's defence industry.

SOUTH AUSTRALIA

SA Defence Industry Scholarship Program

Up to \$7,500

For Uni students (Adelaide, Flinders, UniSA)

Courses: Engineering, Physics, Chemistry, Materials Science

Includes work placement with defence companies

VICTORIA

Victorian Defence Industry Scholarships

STEM students in 3rd year or Honours

Industry placements with defence companies

Backed by Defence Science Institute & Vic Gov

WESTERN AUSTRALIA

Defence Industry Pathways Program

For uni and VET students

Fields: Engineering, Logistics, Cyber, ICT

Paid internship and graduate placement opportunities

Women in Defence Industry Scholarship

Fully funded for women in engineering, electronics, cyber

Includes industry tours and up to 4 weeks' work placement

NATIONAL OPPORTUNITIES

Defence Industry Internship Program (DIIP)

For uni students in second last or final year

Fields: Engineering, ICT, Cybersecurity, Technology

Paid 12-week internships with small to medium defence enterprises

Provides hands-on experience and networking opportunities in the defence industry

Occupation Pathways

Engineer

What they do: Design and develop everything from submarines and drones to radar systems and robotics.

Why it matters: Engineers solve complex problems and turn ideas into real-world solutions that support Australia's defence capability.

Pathways: Study engineering at university (mechanical, electrical, systems, aerospace). Some start through VET, apprenticeships, or cadetships.



Cyber Security Analyst

What they do: Protect defence systems from cyber threats and hackers, keeping sensitive information safe.

Why it matters: With growing digital risks, cyber experts are essential for national security.

Pathways: Study IT or cybersecurity at TAFE or university; entry-level roles and cadetships are available, especially through defence programs.



Technicians & Trades (Manufacturing)

What they do: Build, install and maintain defence equipment, such as ship parts, electronics and weapons systems.

Why it matters: Defence projects rely on skilled trades and manufacturers to bring designs to life and technicians keep them working safely.

Pathways: Start with a school-based apprenticeship, VET course (e.g., welding, electrotechnology), or TAFE qualification.



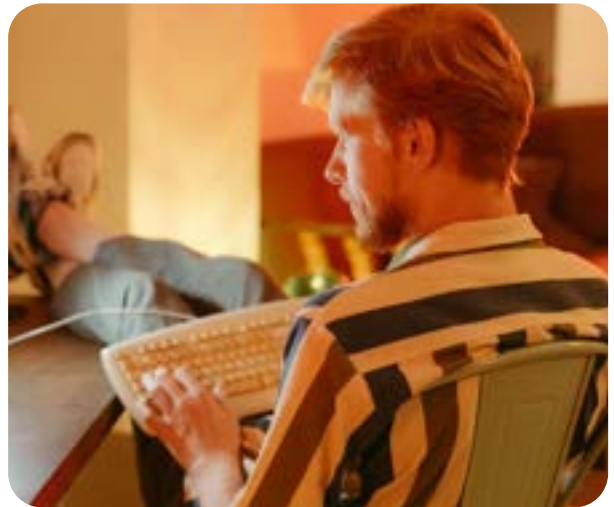
Occupation Pathways

Software Developer

What they do: Create software and apps used in defence tech – from communications systems to AI and automation.

Why it matters: Defence relies on custom-built, secure software to operate advanced systems and respond quickly to threats.

Pathways: Study computer science or software engineering at university; also accessible through tech traineeships or TAFE.



Intelligence Officers

What they do: Analyse data, patterns and global activity to help inform strategic decisions.

Why it matters: Intelligence is key to staying ahead of threats and making informed, tactical choices.

Pathways: Study international relations, political science, linguistics, or data analysis. Some enter via the ADF or government graduate programs.



Logistics & Project Management

What they do: These roles focus on keeping defence projects moving. Logistics Coordinators handle the delivery of supplies and equipment, while Project Managers oversee timelines, teams and budgets.

Why it matters: Defence relies on precision and planning. Without strong logistics and leadership, even the most advanced systems can't function.

Pathways: Start with a certificate or diploma in logistics, business, or project support – or go through university to study business, engineering, or project management. Many build experience in technical roles before stepping into leadership.



Occupation Pathways

Success Stories

If you're keen to hear firsthand how other young people got their start in the defence industry and why it's the perfect fit for them, you can check out their stories below or find videos and more on their career journeys over at **Launching Your Trade Career in Defence Industry** and **STEM Careers in Defence Industry**.

Ashleigh

Project Coordinator – Naval Shipbuilding

Pathway: TAFE + Industry Placement

Role Overview:

Ashleigh supports project management on submarine builds, working with engineers and suppliers. Her role combines logistics, communication, and technical skills.



"I never thought I'd end up working on submarines! But I love that my job is hands-on, and I'm learning every day."



Occupation Pathways

Joel

Cyber Security Analyst

Pathway: University Graduate Program

Role Overview:

Joel monitors and responds to cyber threats, working in a team that protects sensitive defence information and infrastructure.



"It's fast-paced and super important. We're working on tech that keeps Australia safe from cyber threats."



Michael

Systems Engineer

Pathway: University Graduate Program

Role Overview:

Michael develops and integrates complex systems used in submarines and ships. His role involves problem-solving, teamwork and designing tech that works in extreme conditions



"There's so much variety - I could be working on radar systems one day and underwater drones the next."



Occupation Pathways

Tiarna

Mechanical Apprentice – Shipbuilding

Pathway: School-based Apprenticeship

Role Overview:

Tiarna is completing her apprenticeship while helping to construct major naval vessels. She works with tradespeople and gains skills in metalwork, mechanics and safety procedures.



"I get to work on real projects straight out of school. It's hard work, but I love using my hands and learning on the job."



Ready to Explore More?

A career in defence industry can take you places — literally. With national and international projects, lifelong learning opportunities and a strong focus on diversity, collaboration and innovation, the possibilities are endless.

Choosing a career in defence industry means that you can:

- Grow into leadership or specialist roles.
- Move across sectors — from land to cyber to aerospace.
- Stay in your home state or take your skills around the world.
- Keep learning and adapting to new tech and ideas.

If you're curious about your next steps, here's where you can go for more info, career tips, and interactive tools:

FORGE YOUR FUTURE ACADEMY

Year13 has teamed up with ForgeYourFuture powered by WithYouWithMe, to show you what's available in defence industry, what it takes to make a career of it, and what the future could hold for you.

The first module **Launching Your Trade Career in Defence Industry** focuses on trades and vocational careers in defence industry, while the second module focuses on **STEM Careers in Defence Industry**.

Each module covers:

- An explanation of what defence industry is, as well as key benefits
- Unique jobs, roles and careers in defence industry
- Qualifications, skills and pathways they can choose to start their career in defence industry

SCAN ME



YEAR13 VIRTUAL WORK EXPERIENCE

Curious what a Project Manager in defence industry does day to day? Explore this **virtual work experience** to get a behind-the-scenes look at their role, responsibilities, and career path.

Ready to Explore More?

Forge Your Future – Fast-Track Your Defence Career

Forge Your Future is a government-backed initiative designed to connect high school students with career pathways in Australia's defence industry.

Developed by [WithYouWithMe](#) and [Year13](#), the program offers:

- AI-driven career matching to align your strengths with defence industry roles
- Interactive e-learning modules and virtual work experiences
- Mentorship opportunities with industry professionals
- Connections to leading defence employers like BAE Systems and Babcock.

Find Your Place SA – Discover your career in defence industries

- Information on study options and career pathways
- Real-life career profiles and job opportunities
- Resources for students, graduates, and job seekers.

Defence SA – South Australia's lead government agency for defence

- Detailed info on SA's defence projects – including shipbuilding, aerospace, and cyber
- Career pathway support – how to get started in trades, STEM, university, or government roles
- Industry updates – stay current with defence news, future job trends, and investment projects.

Skills Road Career Quiz

- Discover your personal strengths and how they match with different defence industry roles.

Talk to Your Career Advisor

- Don't forget – your school career advisor can help you find VET options, uni pathways, or defence-focused programs in your area.