

Product Design and Technologies

UNIT 3 Ethical product design and Development

In this unit, students analyse and evaluate existing products and current technological innovations in product design. They achieve this through understanding the importance of a design brief, learning about factors that influence design, and using the Double Diamond design approach as a framework.

AREA OF STUDY 1 Influences on design, development and production of products

Outcome 1 On completion of this unit the student should be able to critique examples of ethical product design and innovation within industrial settings.

AREA OF STUDY 2 Investigating opportunities for ethical design and production

Outcome 2 On completion of this unit the student should be able to investigate a need or opportunity that relates to ethics and formulate a design brief, conduct research to analyse current market needs or opportunities and propose, evaluate and critique graphical product concepts.

AREA OF STUDY 3 Developing a final proof of concept for ethical production

Outcome 3 On completion of this unit the student should be able to evaluate product concepts related to ethical design, synthesise and apply feedback to justify a final proof of concept, and plan to make the product safely.

UNIT 4 Production and evaluation of ethical designs

In this unit students continue to work as designers throughout the production process. They observe safe work practices in their chosen design specialisations by refining their production skills using a range of materials, tools and processes. Students collect, analyse, interpret and present data, use ethical research methods and engage with end user(s) to gain feedback and apply their research and findings to the production of their designed solution.

AREA OF STUDY 1 Managing production for ethical designs

Outcome 1 On completion of this unit the student should be able to implement a scheduled production plan, using a range of materials, tools and processes and managing time and other resources effectively and efficiently to safely make the product designed in Unit 3

AREA OF STUDY 2 Evaluation and speculative design

Outcome 2 On completion of this unit the student should be able to synthesise data to evaluate a range of products, including making judgments about the success of each product, and discuss product designs in regard to entrepreneurial activity, innovation and sustainability and/or other ethical considerations.