

Technology and Applied Studies

Design and Technology

COURSE DETAILS

Hours	240 hours
Type	Board Developed Course
Duration	2 years
Unit Value	2-unit Year 11 2-unit Year 12
HSC Exam	Yes
ATAR	Yes
Exclusions	Nil
RECOGNITION	HSC Qualification

COURSE DESCRIPTION

Design and Technology develops conceptual understanding and enables students to creatively apply these to specific technological endeavours through design projects. It also seeks to develop students' appreciation of the historical and cultural influences on design and the interrelationships of design, technology, society and the environment.

Design and Technology has a unique focus on creativity, innovation and the successful implementation of innovative ideas. Students will investigate the importance of evaluation, the role of computer-based technologies, management, communication and collaborative design, as well as exploring current and emerging technologies. Through the completion of quality design projects, students are provided with the opportunity to develop specific production and manufacturing skills.

Design and Technology is inclusive of the needs, interests and aspirations of all students. It provides opportunities for students to develop design projects in areas of individual interest, to discuss equity issues related to design, production and manufacturing in the Australian society and to consider careers in the fields of design and manufacturing.

AIMS

Design and Technology is designed to develop students' confidence, competence and responsibility in designing, producing and evaluating to meet both needs and opportunities, and to understand the factors that contribute to successful design and production.

TOPICS COVERED

Year 11 Course
Designing and Producing, including the study of design theory, design processes, creativity, collaborative design, research, management, using resources, communication, manufacturing and production, computer-based technologies, safety, evaluation, environmental issues, analysis, marketing and manipulation of materials, tools and techniques.

In the Year 11 course, students must participate in hands-on design activities. In the Year 12 course the comprehensive study of designing and producing that were studied in the Year 11 course are synthesised and applied. This culminates in the development and realisation of the MDP and the presentation of a case study on an emerging technology

Year 12 Course

The Year 12 Course has two principal components:

- Innovation and Emerging Technologies, including a case study of innovation.
- The study of designing and producing, which includes a Major Design Project (MDP). A Design Folio records the development of the MDP and includes a Project Proposal, Project Management, Project Development and Realisation, and Project Evaluation. The MDP can be designed and produced from any material or may be a graphic or modelled presentation.

ASSESSMENT

Assessment strategies may include:

- Examinations
- Research Tasks
- Practicals

POTENTIAL CAREERS / REASONS TO CHOOSE COURSE

- Industrial / Interior/Architecture Design
- Interior Decoration
- Graphic Design/Visual Communication
- Textile / Fashion / Jewellery Design
- Exhibition Design
- Design Management
- Furniture / Digital / Other Design disciplines

YEAR 11 COURSE OUTCOMES (from NESA)

- examines design theory and practice, and considers the factors affecting designing and producing in design projects
- identifies design and production processes in domestic, community, industrial and commercial settings
- explains the impact of a range of design and technology activities on the individual, society and the environment through the development of projects
- investigates and experiments with techniques in creative and collaborative approaches in designing and producing
- uses design processes in the development and production of design solutions to meet identified needs and opportunities
- uses resources effectively and safely in the development and production of design solutions
- evaluates the processes and outcomes of designing and producing
- uses a variety of management techniques and tools to develop design projects
- communicates ideas and solutions using a range of techniques
- uses a variety of research methods to inform the development and modification of design ideas
- investigates a range of manufacturing and production processes and relates these to aspects of design projects
- evaluates and uses computer-based technologies in designing and producing