



Product Design & Technology

Streams

Three streams are available:

- Fabrics
- Metals
- Wood

Description

Product design is a response to changing needs and to improve quality of life by designing creative, innovative and sustainable products. Product design is enhanced through knowledge of social, technological, economic, historical, ethical, legal, environmental and cultural factors. These factors influence the aesthetics, form and function of products.

Unit Topics

Unit 1 - Sustainable product redevelopment

This unit focuses on the analysis, modification and improvement of a product design with consideration of sustainability. A folio documenting the stages and steps of the design process must also be submitted.

Unit 2 - Collaborative design

Students work in teams to design and develop an item in a product range or contribute to the design, planning and production of a group product. They focus on: end-user/s' needs and wants; function, purpose and context for product design; aesthetics; materials and sustainability; and the impact of these factors on a design solution.

Unit 3 - Applying the product design process

In this unit students are engaged in the design and development of a product that addresses a personal, local, or global problem (such as humanitarian issues), or that meets the needs and wants of a potential end-user/s. The product is developed through a design process and is influenced by; purpose, function and context of the product; user-centred design; innovation and creativity; design elements and principles; sustainability concerns; economic limitations; legal responsibilities; material characteristics and properties; and technology.

Unit 4 - Product development and evaluation

Students engage with an end-user/s to gain feedback throughout the process of production and make comparisons between similar products to help evaluate the success of a product in relation to a range of product design factors. The environmental, economic and social impact of products throughout their life cycle are analysed and evaluated with reference to the product design factors.

Skill Development

Design thinking, develop an understanding of product development, apply design practice, explore and determine characteristics and properties of materials, risk assessment to apply appropriate, efficient and safe methods of working and project management techniques of time and sequence. Analyse and evaluate and understand sustainability.

Possible Assessment Tasks

The student's level of achievement in Units 3 and 4 will be determined by School-assessed Coursework (SACs) and a School-assessed Task (SAT) as specified in the VCE study design, and external assessment.

Activities/Camps/Excursions

Design and making of a product for a client. Development of a folio to document the process.

Career Options

Designers, practical skill for various trades and professions