VCE Product Design and Technology - Metals

This study engages students in technological tasks that call on their knowledge and understanding of the materials and production processes to design and make products suitable for their intended purpose.

They develop the ability to understand, communicate and develop creative solutions while using tools, resources and human capabilities to complete a task for a given context.

Unit 1 & 2

In Unit 1 & 2 you will:

- Develop knowledge in the role of scheduled production plans
- Investigate methods for relevant product design factors in a design brief
- Develop knowledge of tools, equipment and machines for specific purposes
- Use critical and creative design techniques
- Learn methods of construction to efficiently make a product
- Work individually and as a team to make products safely

Unit 3 & 4

In Unit 3 & 4 you will:

- Analyse product design factors that influence the designer
- Assess the steps of the initial stages of the product design process
- Develop knowledge of innovation and its importance in product development
- Learn methods of communicating a product specification in working drawings
- Develop an understanding of key factors to determine the quality of a product
- Learn risk management associated with selecting and using tools

Types of assessment

- Written tests
- Written reports
- Project construction
- Design folio
- Examination
- Tools and machinery skills
- Design construction exercises

Class Activities

- Follow the design process
- Research projects to be constructed
- Investigate design and material options
- Develop technical drawings
- Gain knowledge of materials and tools
- Learn various production techniques

Careers that may link to this subject area

Builder	Civil Engineer	Fitter and Turner	Industrial Designer
Material Engineer	Metallurgist	Musical Instrument Maker	Plumber
Sheet Metal Worker	Teacher	Welder/Boiler Maker	

Please note: VCE D&T Textiles, VCE D&T Metals and VCE D&T Wood are all run on the same course guidelines therefore students can only choose one of these subjects as credit towards their VCE.