

# **VCE PRODUCT DESIGN AND TECHNOLOGIES** INFORMATION GUIDE



# **VCE PRODUCT DESIGN AND TECHNOLOGIES**

# RATIONALE

Designers play an important part in our daily lives. They determine the form and function of the products we use and transform ideas into drawings and plans for the creation of products that fulfil human needs and wants. Students also consider sustainability issues. Students consider the consequences of product design choices, and develop skills to critically analyse existing products and develop their own creative solutions.

# UNIT 1

# Area of Study 1

# Sustainable redevelopment of a product

This area of study introduces students to the product design process, lifecycle analysis/assessment (LCA), IP and the product design factors, with an emphasis on sustainability. Students consider contemporary practices of designers who claim to incorporate sustainable practices.

# Area of Study 2

## Producing and evaluating a redeveloped product

This area of study focuses on the implementation of the design and planning completed in Area of Study 1. Students refer to their working drawings and scheduled production plan, and apply a range of techniques and processes safely to make a redeveloped product.

# UNIT 2

# Area of Study 1

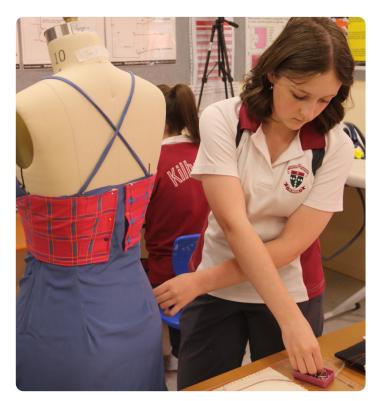
## Designing within a team

This area of study enables students to apply the product design process collaboratively and individually. Each student works in a design team to generate one design brief collaboratively from a scenario, based around a theme and contributes to the design, planning and production of a group product. Individual roles and responsibilities are allocated. Students develop evaluation criteria for the finished product to determine if each criterion has been met through testing and feedback.

# Area of Study 2

# Producing and evaluating within a team

In this area of study students apply knowledge, skills, techniques and processes, including risk management, to make their product, designed in Area of Study 1, in accordance with the team requirements. To ensure consistency throughout production, the team refers to the historical or contemporary cultural design movement or style that inspired their designs. To facilitate communication, students may use digital and project management tools.





# **INFORMATION GUIDE**

# **CAREER OPTIONS**

- Costume Designer
- Curator
- Designer

- Historian
- Interior Decorator
- Marketing

- Milliner
- Retail
- Screen Printer

# UNIT 3

#### Area of Study 1 Designing for end users

In this area of study students examine the product design process and develop skills in writing a design brief, which is vital for the development of a viable solution. They focus on identifying and designing for a potential end-user/s of an intended product. They consider methods used to establish an end-user/s' needs for the development of a solution to a design problem.

# Area of Study 2

# Product development in industry

This area of study focuses on the factors, processes and systems that influence the design and development of products within industrial settings. Students explore specific cases and the reasons why design and innovation are integral to value-adding to products. They also examine how companies react to market demands and technological developments. Students look at the role of market research in determining end-user/s' needs in relation to sustainability.

# Area of Study 3

# Designing for others

This area of study focuses on students working as designers and applying the product design process to meet the requirements of an end-user/s. Students identify specific needs of the end-user/s by referring to the product design factors and conducting research. Students prepare a design brief that guides their work for this area of study and for Areas of Study 2 and 3 in Unit 4. They examine appropriate techniques for recording and communicating data, information, visualisation of ideas, design options and working drawings and for obtaining end-user/s' feedback. They appropriately acknowledge resources and the IP of others. Students use creative and critical design thinking techniques throughout the product design process.

# UNIT 4

# Area of Study 1

# Product analysis and comparison

In this area of study students examine design factors that influence the success of commercially available products. Products are analysed and evaluated in terms of the product design factors. Students develop an understanding of what people value and how they evaluate products using qualitative and quantitative methods, and consider the impacts and consequences of product design success and failure.

# Area of Study 2

## Product manufacture

This area of study focuses on the skills, production techniques and processes employed to make a product to suit the needs of an end-user/s. Students continue to implement their scheduled production plan, apply skills and processes including risk management in the safe use of materials, tools, equipment and machines, and complete the product to specified standards of quality. They monitor and record their progress and make modifications if necessary.

# Area of Study 3

## Product evaluation

This area of study focuses on the student's application of evaluation criteria, the performance of checks and tests, and gaining end-user/s' feedback to determine how well a product meets the needs and requirements outlined in the design brief developed in Unit 3. To find out more information about VCE Product Design and Technologies at Kilbreda College, please contact:

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# **Kilbreda College**

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This flyer is correct as of July 2024, however may be subject to change.

