VCE Product Design and Technology
2018–2023 Frequently Asked Questions

1. What is the difference between a product and a prototype?

In this study, references to product includes prototype.

If appropriate, the finished product may be a high-quality prototype that is constructed to exactly resemble the preferred option, allowing for design modifications where required. The prototype should also attempt to meet all of the evaluation criteria developed from the design brief. Appropriate substitute materials and processes may be used to create structure, form or finish if the originally specified materials and processes are not available (for example, 3D printing replacing injection moulding or manual cutting of fabric replacing laser cutting). All products must be full scale. Non-functioning electrical systems or other technologies can be simulated to indicate placement and function.

1. What are mockups?

Mockups are trial models, process trials or calico toiles that are suitable for development stages only. They can be made to a smaller scale and may not accurately reflect intended materials or finish.

1. Where do I teach the cross-study specifications?

Cross-study specifications provide details of the concepts which underpin Units 1 to 4 of the study design. These concepts need to be taught across all the units as they provide students with the methodology to achieve designed solutions.

1. What range of materials is suitable to make products?

The Materials categories are provided on page 12 of the *VCE Product Design and Technology Study Design 2018-2023*. There are three categories of materials listed:

* Category 1 materials include wood/timber, metal, textiles/yarns/fibres/fabrics and polymers (plastics)
* Category 2 materials include ceramics and glass
* Category 3 materials include chemical fasteners, dyes/paints, surface treatments/protective coatings and finishes. This category of materials is used to fasten, decorate, protect and finish Category 1 and 2 materials.

In Units 1 and 2, students incorporate one or more materials from Category 1 or 2 in their product design.

In Units 3 and 4, students use materials predominantly from Category 1, but may incorporate Category 2 materials in their product design.

1. What is a scheduled production plan?

A scheduled production plan sets out the steps that are required for the Planning and production stage of the product design process. Developing a scheduled production plan provides a sequenced plan and timeline and lists tools, equipment and machines with risk assessment, quality measures and a materials list. A Scheduled production plan can also be called a Scheduled work plan.

1. What are the sustainability frameworks and strategies that influence design, production and distribution?

This study design refers to four sustainability frameworks and strategies that influence design, production and distribution:

* Life cycle analysis/assessment (LCA)
* Cradle to cradle concept
* Design for Disassembly (DfD)
* Extended Producer Responsibility (EPR) or product stewardship

Sustainability frameworks and strategies can be referred to as systems and/or models.

1. What is the difference between risk assessment and risk management?

Risk assessment refers to the process of evaluating potential risks that may be involved, such as in the production process.

Risk management refers to controlling the risks through:

* identifying the hazards
* understanding the nature of these hazards and the likelihood of harm
* determining the options for eliminating and reducing the hazards
* reviewing the implemented option to manage the risk.