



## Design Technology

STAGE 6 HSC ~ COURSE OUTLINE

Students study design processes, design theory and factors in relation to design projects.

In the *HSC course*, students undertake a study of innovation and emerging technologies, which includes a case study of an innovation. They also study designing and producing, which includes the completion of a Major Design Project.

### Main Topics Covered - *HSC Course*

Innovation and Emerging Technologies, including a case study of innovation. The study of designing and producing includes a Major Design Project. The project folio addresses 3 key areas: project proposal and management, project development and realisation, and project evaluation.



### Particular Course Requirements

In the HSC course the activities of designing and producing that were studied in the Preliminary course are synthesised and applied. This culminates in the development and realisation of a Major Design Project and the presentation of a case study.

### HSC Syllabus Course Outcomes

- H1.1** Critically analyses the factors affecting design and the development and success of design projects.
- H1.2** Relates the practices and processes of designers and producers to the major design project.
- H2.1** Explains the influence of trends in society on design and production.
- H2.2** Evaluates the impact of design and innovation on society and the environment.
- H3.1** Analyses the factors that influence innovation and the success of innovation.
- H3.2** Uses creative and innovative approaches in designing and producing.
- H4.1** Identifies a need or opportunity and researches and explores ideas for design development and production of the major design project.
- H4.2** Selects and uses resources responsibly and safely to realise a quality major design project.
- H4.3** Evaluates the processes undertaken and the impacts of the major design project.
- H5.1** Manages the development of a quality major design project.
- H5.2** Selects and uses appropriate research methods and communication techniques.
- H6.1** Justifies technological activities undertaken in the major design project through the study of industrial and commercial practices.

**H6.2** Critically assesses the emergence and impact of new technologies, and the factors affecting their development.

### BOSTES Assessment Information

| External Assessment  | Mark       | Internal Assessment  | Weighting  |
|--|------------|--|------------|
| <b>Written examination – Section I</b><br>Objective response questions | 10         | <b>Innovation and emerging technologies:</b><br>▪ case study of an innovation<br>▪ other tasks | <b>20</b>  |
| Section II – Short-answer questions                                    | 15         |  | <b>20</b>  |
| Section III – One extended response question                           | 15         |  | <b>60</b>  |
| <b>Major Design Project</b>  | 60         | <b>Designing and producing</b>   | <b>60</b>  |
| <b>TOTAL MARKS</b>   | <b>100</b> | <b>TOTAL MARKS</b>   | <b>100</b> |

### School Based Evidence of Learning ~ Formal Task Schedule

| Task No.     | Targeted Outcomes                     | Learning Context   | Task  | Date Due        | Weighting  |            | Marks       |
|--------------|---------------------------------------|--|---|-----------------|------------|------------|-------------|
|              |                                       |  |   |                 | A          | B          |             |
| 1            | H – 1.1, 4.1                          | Design and Producing   | Major Project Proposal                            | Tm 4<br>Wk 6    |            | 15%        | 15%         |
| 2            | H – 1.2, 3.1, 3.2, 5.2                | Research and Report  | Innovation – Case Study                           | Tm 1<br>Wk 6    | 20%        |            | 20%         |
| 3            | H – 1.1., 4.1, 4.2, 5.1, 6.1,         | Designing and Producing  | Major Design Project – Management and Development | Tm 2<br>Wk 5    | 10%        | 10%        | 20%         |
| 4            | H – 1.1, 1.2, 2.1, 2.2, 3.1, 6.1, 6.2 | Innovation and Emerging Technologies and Designing and Producing | Trial HSC Examination                             | Tm 2<br>Wk 9/10 | 10%        | 25%        | 35%         |
| 5            | H – 1.1, 1.2, 2.2, 4.3, 6.2           | Designing and Producing  | Major Design Project Evaluation                   | Tm 3<br>Wk 1    |            | 10%        | 10%         |
| <b>TOTAL</b> |                                       |  |   |                 | <b>40%</b> | <b>60%</b> | <b>100%</b> |