An Introduction to Design and Technology Stage 6 in the New HSC

The new Design and Technology Stage 6 Syllabus replaces the current 2/3 Unit (common) and 3 Unit (additional) syllabus in Design and Technology (1992). The new syllabus will be implemented with Year 11 in 2000 and will be first examined in 2001.

The syllabus provides information that was formerly available in the KLA handbook. This includes descriptions of course requirements, assessment weightings for internal and external examination and examination specifications.

What is similar?

The new syllabus is similar to the current syllabus in that there is a focus on designing and producing. There also continues to be a Major Design Project in the HSC course.

The current 3 unit content on innovation and entrepreneurial activity has been modified and integrated into the revised HSC course under the heading ‘Innovation and Emerging Technologies’.

What are the overall improvements?

- The new syllabus provides all students with the opportunity to access challenging outcomes and content including some content that was part of the current 3 unit course.
- The scope and depth of course content is made clear in the description of what ‘students learn about’ and what ‘students learn to’.
- There is an emphasis on innovation and the link to designing and producing is clear.
- The overlap with Business Studies has been removed.
- The comparative case study has been removed and replaced with an integrated study of technologies in industry during the development of design projects.

The following changes have been made to particular sections of the syllabus

Rationale (p 6)

The rationale provides a more direct link between the relevance of Design and Technology in society and what the students study in the course.
Aim (p 8)

The revised aim is based on the current aim, but has been revised into a more succinct statement.

Objectives (p 8)

The number of objectives in the syllabus has decreased and they are no longer specifically organised into knowledge, skills and attitudes objectives. Knowledge, skills and attitudes are incorporated into the range of objectives.

Course Structure (p 9)

The Preliminary course content, which includes the production of a minimum of two design projects, appears under the one heading of ‘designing and producing’.

The HSC course content appears under two headings; ‘innovation and emerging technologies’ and ‘designing and producing’. The production of the Major Design Project also occurs in relation to these two areas of content.

Outcomes (p 11)

The number of outcomes in the syllabus has been reduced and there are clear and explicit links to objectives and content in both the Preliminary and HSC courses.

Content (pp 13–21)

In the Preliminary course, new areas of content are design theory and practice; creative approaches; collaborative approaches; project management techniques; factors affecting management; and computer-based technologies and their application. Content that has been removed from the course includes the investigative component of the comparative case study and the Major Design Project proposal.

In the HSC course, new areas of content are examples of success and failure in design; the work of designers; factors that impact on the success of innovation; creativity and innovative design practice; methods of action, time and finance plans, and; emerging technologies. Content that has been removed from the course includes the comparative case study.

Course Requirements (p 22)

In general, the course requirements are unchanged. However, there is no longer a requirement for a comparative case study or for students to develop a project proposal in the preliminary course. In the revised syllabus, students are required to do a case study of innovation in the HSC year.
Assessment (p 24)

The completion of at least two design projects in the Preliminary course is required.

Assessment for the HSC is unchanged; however, the following note is made in the assessment table: ‘aspects of the Major Design Project that are used for school-based assessment should not use the HSC exam marking criteria for internal assessment’. This statement emphasises the fact that the Major Projects cannot be assessed twice using the same assessment criteria.

The Major Design Project examination criteria have been modified slightly: ‘Project Proposal’ and ‘Project Management’ have been combined into one section and the criteria have been reorganised into five sub sections; in the ‘Project Development and Realisation’ section, consideration of design factors relevant to the Major Design Project has been included in the criteria; and in the evaluation section the relationship of the final product, system or environment to the project proposal has been included.

What will be needed to teach this subject?

• The Design and Technology Stage 6 Syllabus.

• Specimen examination and marking guidelines.

While programs will need to be revised to reflect new syllabus content and outcomes, aspects of current programs may be incorporated where appropriate.

Equipment, used in schools, that meets the requirements of the current syllabus should be adequate to meet the requirements of the new syllabus.

Current resources are appropriate for use with the new syllabuses although there may need to be some adjustment in the way teachers use them.

A further subject-specific document is being developed by the Board of Studies for distribution later in the year. This will assist teachers with the implementation of the revised syllabuses.

A list of a number of resources will be placed on the Board’s website, http://www.boardofstudies.nsw.edu.au.

The Board of Studies will also provide assessment support materials, which will be generic across subjects.
Cross-sectoral professional development workshops (Department of Education and Training, Catholic Education Commission and members of the Association of Independent Schools) for Design and Technology Stage 6 will be held. Venues and dates for these workshops have been published on the New HSC website — [http://www.newhsc.schools.nsw.edu.au](http://www.newhsc.schools.nsw.edu.au) — and distributed to schools. The materials from the workshops will be available on this website.

*CURRICULUM SUPPORT for Teaching in Technology and Applied Studies 7–12* — a publication distributed each term by the Department of Education and Training — will carry an HSC supplement.

*Assessment and Reporting Bulletin* — published each term as a joint venture of the Department of Education and Training, the Catholic Education Commission and the Association of Independent Schools — will build on principles outlined in Board of Studies’ newsletters and assessment support materials.