



B O A R D O F S T U D I E S
NEW SOUTH WALES

HSC
Design and Technology

Marking Guidelines
Major Design Project

Major Design Project

HSC examination overview

The HSC examination for Design and Technology consists of a written paper worth 40 marks and a Major Design Project worth 60 marks.

The Major Design Project will include the submission of:

- (i) a folio documenting the project proposal and project management, project development and realisation, and project evaluation
- (ii) a product or a system or an environment (PSE).

Component: Project Proposal and Project Management (15 marks)

This section requires candidates to provide detail in their portfolio about the intended direction of their Major Design Project (MDP) and how they plan to proceed with and manage the project to completion. This section should provide a constant reference point as students progress through the Project Development and Realisation, and Evaluation.

Assessment criteria

- Identification and exploration of the need
- Areas of investigation
- Criteria to evaluate success
- Action, time and finance plans and their application

Outcomes assessed: H1.2, H4.1, H5.1, H5.2

Marking guidelines

Criteria	Marks
<ul style="list-style-type: none">• Identifies and provides a detailed exploration of genuine needs and opportunities, justifying final selection for the development of the MDP• Describes relevant areas of investigation which relate clearly to the need, and provides direction for further action• Establishes and analyses appropriate criteria to evaluate the success of the PSE• Formulates and evaluates well-documented action, time and finance plans with clear evidence of their application to the PSE	13–15
<ul style="list-style-type: none">• Identifies and provides an exploration of needs and opportunities, in relation to the development of the MDP• Describes some relevant areas of investigation in relation to the need and provides evidence that these were investigated• Describes appropriate criteria to evaluate the success of the PSE, with little analysis of these criteria• Formulates action, time and finance plans, and shows some evidence of their application to the PSE	10–12
<ul style="list-style-type: none">• States a need with some exploration in relation to the	

Criteria	Marks
<p>development of the MDP</p> <ul style="list-style-type: none"> • Identifies areas of investigation in relation to the need, or shows evidence of being investigated • Briefly describes criteria to evaluate the success of the PSE, with no analysis of these criteria • Formulates and applies action and/or time and/or finance plans 	7-9
<ul style="list-style-type: none"> • States a need with limited exploration in relation to the development of the MDP • Lists areas of investigation in relation to the need which may not relate to further action, or shows evidence of areas being investigated • Briefly describes criteria, some of which may be inappropriate to evaluate the success of the PSE • Some evidence of the application of action, time or finance planning 	4-6
<ul style="list-style-type: none"> • Need stated without clarity, nor explored in relation to the development of the MDP • Names an area of investigation • Lists criteria, some of which may be inappropriate to evaluate the success of the PSE • Action, time or finance planning not evident 	1-3

Component: Project Development and Realisation (35 marks)

In this section, the development and realisation of the Major Design Project (both the folio and product, system or environment) is clearly evidenced, documented and explained.

Assessment criteria

- Evidence of creativity – ideas generation, degree of difference and exploration of existing ideas
- Consideration of design factors relevant to the Major Design Project (as defined in the *Design and Technology Stage 6 Syllabus*)
- Appropriate research and experimentation of materials, tools, techniques and testing of design solutions
- Application of conclusions
- Identification and justification of ideas and resources used
- Use of communication and presentation techniques
- Evidence and application of practical skills to produce a quality project

Outcomes assessed: H1.2, H2.1, H3.2, H4.2, H5.1, H5.2

Marking guidelines

Criteria	Marks
<ul style="list-style-type: none">• Demonstrates the substantial application of creativity in the development of the MDP• Analyses a range of design factors relevant to the PSE and applies them• Undertakes, evaluates and applies a range of appropriate research experimentation and design solution testing in the development of the MDP• Applies conclusions drawn from research and experimentation and design solution testing to the MDP• Justifies the selection and use of ideas and resources used for the PSE• Succinctly demonstrates a range of appropriate quality communication and presentation techniques• Applies a range of high-quality practical skills in the development of the PSE	29–35
<ul style="list-style-type: none">• Demonstrates application of creativity in the development of the MDP• Describes a range of design factors relevant to the PSE and applies them• Undertakes, evaluates and applies appropriate research, experimentation and design solution testing in the development of the MDP• Demonstrates some application of conclusions drawn from the research and experimentation and/or design solution testing to the MDP	

Criteria	Marks
<ul style="list-style-type: none"> • Explains the selection and use of ideas and resources used for the PSE • Demonstrates varied and appropriate communication and presentation techniques in a concise manner • Applies a range of sound practical skills in the development of the PSE 	22–28
<ul style="list-style-type: none"> • Demonstrates some creativity in the development of the MDP • Describes some design factors relevant to the PSE and applies them • Undertakes, evaluates and applies some appropriate research, experimentation and/or design solution testing in the development of the MDP • Demonstrates some selective application of conclusions drawn from research and/or experimentation and/or design solution testing • Describes the selection and use of ideas and/or resources used for the PSE • Demonstrates appropriate communication and presentation techniques • Applies sound practical skills in the development of the PSE 	15–21
<ul style="list-style-type: none"> • Provides some evidence of design factors, most of which are relevant to the PSE and applies them • Provides some evidence of ideas generation and/or exploration of existing ideas • Evaluates and/or applies limited appropriate research and/or experimentation and/or design solution testing • Demonstrates limited application of conclusions drawn from research and/or experimentation and/or design solution testing • Describes some ideas and/or resources used in the PSE • Demonstrates a limited range of communication and presentation techniques • Applies basic practical skills in the development of the PSE 	8–14
<ul style="list-style-type: none"> • Provides limited evidence of design factors, few of which are relevant to the PSE • Provides limited evidence of ideas generation and/or exploration of existing ideas • Minimal evidence of appropriate research and/or experimentation and/or design solution testing • Demonstrates minimal application of conclusions drawn from research and/or experimentation and/or design solution testing • Lists few ideas and/or resources used in the PSE • Demonstrates minimal communication and presentation techniques • Applies minimal practical skills in the development of the PSE 	1–7

Component: Evaluation (10 marks)

In this section, candidates are requested to provide evidence of continual evaluation throughout the development and realisation of the Major Design Project. This also includes linking back to the original criteria developed in the Project Proposal and Project Management section to evaluate the success of the project.

Assessment criteria

- Recording and application of evaluation procedures throughout the design project
- Analysis and evaluation of functional and aesthetic aspects of design
- Final evaluation with respect to the project’s impact on the individual, society and the environment
- Relationship of the final product, system or environment to the project proposal

Outcomes assessed: H1.2, H4.2, H4.3, H5.1

Marking guidelines

Criteria	Marks
<ul style="list-style-type: none">• Critically evaluates aspects of the PSE throughout its entire development• Analyses and critically evaluates the functional and aesthetic aspects of the PSE• Critically evaluates the impact of the PSE on the individual, society and the environment• Analyses the relationship of the PSE to the criteria for success identified in the project proposal	9–10
<ul style="list-style-type: none">• Evaluates some aspects of the PSE throughout its entire development• Explains the functional and aesthetic aspects of the PSE• Explains the impact of the PSE on the individual, society and the environment• Compares the relationship of the PSE to the criteria for success identified in the project proposal	7–8
<ul style="list-style-type: none">• Judges the success of some aspects of the PSE through stages of its development• Describes some functional and/or aesthetic aspects of the PSE• Describes the impact of the MDP on the individual and/or society and/or the environment or exhibits evidence that the impact on the environment was considered• Checks the PSE against the criteria for success identified in the project proposal, with little or no explanation	5–6
<ul style="list-style-type: none">• Describes, with little justification, the success of several aspects of the PSE or exhibits evaluation in the PSE’s development• Describes a functional and/or aesthetic aspect of the PSE• Briefly describes the impact of the PSE on the individual and/or society and/or the environment• Checks the PSE against some of the criteria for success identified in	3–4

Criteria	Marks
the project proposal, without explanation	
<ul style="list-style-type: none"> • Describes, without justification, the success of an aspect of the PSE or provides some evidence of evaluation in the PSE's development • Names a functional or aesthetic aspect of the PSE • Minimal and/or inaccurate description of the impact of the PSE on the individual, society or the environment • Does not clearly relate the PSE to the criteria for success identified in the project proposal 	1–2