



## SAMPLE ASSESSMENT OUTLINE

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**ENGINEERING STUDIES**  
**ATAR YEAR 12**

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## Sample assessment outline

### Engineering Studies – ATAR Year 12

#### Unit 3 and Unit 4

Assessment type	Assessment type weighting	Duration	Assessment task
Design 30%	2%	Semester 1 Weeks 1–3	<b>Task 1 Part A:</b> Design project one <ul style="list-style-type: none"> <li>develop a comprehensive design brief – description of problem or need or opportunity, incorporating researched examples of existing solutions, resulting in a list of requirements and restrictions</li> <li>identify and assess existing solutions</li> <li>research and critique materials and components relevant to the design brief</li> </ul>
	10%	Semester 1 Weeks 4–8	<b>Task 1 Part B:</b> Design project one <ul style="list-style-type: none"> <li>identify and research examples of existing sources of energy</li> <li>research differences and impacts of renewable and non-renewable energy</li> </ul> <b>Task 2:</b> Devise concepts for project one and select the best option for the solution <ul style="list-style-type: none"> <li>identify and research parts, components, materials and energy sources/supplies</li> <li>produce annotated pictorial drawings of ideas, in combination with annotated orthographic concept drawings</li> <li>evaluate concepts and select the best option</li> </ul>
	2%	Semester 1 Week 14	<b>Task 5:</b> Evaluate completed project one <ul style="list-style-type: none"> <li>evaluation report may have additional rating table, written conclusions, descriptions and suggestions for improvement</li> </ul>
	2%	Semester 2 Weeks 1–3	<b>Task 7:</b> Design project two Note: project two may be completely separate from project one or it may be the extension of the theme used for project one. <ul style="list-style-type: none"> <li>develop a comprehensive design brief – description of problem, incorporating researched examples of existing solutions, resulting in a list of requirements and restrictions</li> </ul>
	10%	Semester 2 Weeks 4–9	<b>Task 8:</b> Devise concepts for project two and select the best option for the solution <ul style="list-style-type: none"> <li>identify and continue to research existing solutions</li> <li>identify and research parts, components, materials and energy sources/supplies</li> <li>produce annotated pictorial drawings of ideas</li> <li>produce simple annotated orthographic concept drawings</li> <li>evaluate concepts and select the best option</li> </ul>
	2%	Semester 2 Week 9	<b>Task 10:</b> Research and analyse the life cycle of an engineered product <ul style="list-style-type: none"> <li>research and report on the stages of the life cycle of an engineered product</li> <li>comment on the impacts of the product on society, business and the environment over the life cycle of the product</li> </ul>
	2%	Semester 2 Week 14	<b>Task 12:</b> Evaluate completed project two <ul style="list-style-type: none"> <li>produce a written report on, and use photographs of, the completed project two</li> <li>include a rating table, written conclusions, descriptions and suggestions for improvement</li> </ul>

Assessment type	Assessment type weighting	Duration	Assessment task
Production 30%	5%	Semester 1 Weeks 9–10	<b>Task 3:</b> Produce specifications for the selected solution for project one <ul style="list-style-type: none"> <li>working drawings – detailed orthogonal drawings</li> <li>lists of materials, parts and components, estimated costing</li> <li>develop production plan on a timeline</li> </ul>
	10%	Semester 1 Weeks 10–13	<b>Task 4:</b> Production of project one <ul style="list-style-type: none"> <li>construct the proposed solution, using prepared production plan, materials and available equipment; record progress in design folio</li> </ul>
	5%	Semester 2 Weeks 7–9	<b>Task 9:</b> Produce specifications for project two <ul style="list-style-type: none"> <li>working drawings – detailed orthogonal drawings</li> <li>lists of materials, parts and components, costing</li> <li>develop production plan on a timeline</li> </ul>
	10%	Semester 2 Weeks 10–13	<b>Task 11:</b> Production of project two <ul style="list-style-type: none"> <li>construct the proposed solution, using prepared production plan, materials and available equipment</li> <li>record progress in design folio</li> </ul>
Examination 40%	20%	Examination Semester 1 Week 15	<b>Task 6:</b> Semester 1 Examination – 2.5 hours, using a modified examination design brief from the syllabus Section One: Core content – 10 multiple-choice (10%) and three or four short or extended-answer questions (30%) Section Two: Specialist field – 10 multiple-choice (10%), then 6–8 short or extended-answer questions (50%)
	20%	Examination Semester 2 Week 15	<b>Task 13:</b> Semester 2 Examination – 3 hours, using examination design brief from the syllabus Section One: Core content – 10 multiple-choice (10%) and three or four short or extended-answer questions (30%) Section Two: Specialist field – 10 multiple-choice (10%), then 6–8 short or extended-answer questions (50%)
<b>100%</b>	<b>100%</b>		