**Sample Assessment Outline**

Engineering Studies

ATAR Year 12

**Copyright**

© School Curriculum and Standards Authority, 2015

This document – apart from any third party copyright material contained in it – may be freely copied, or communicated on an intranet, for non-commercial purposes in educational institutions, provided that the School Curriculum and Standards Authority is acknowledged as the copyright owner, and that the Authority’s moral rights are not infringed.

Copying or communication for any other purpose can be done only within the terms of the *Copyright Act 1968* or with prior written permission of the School Curriculum and Standards Authority. Copying or communication of any third party copyright material can be done only within the terms of the *Copyright Act 1968* or with permission of the copyright owners.

Any content in this document that has been derived from the Australian Curriculum may be used under the terms of the [Creative Commons Attribution 4.0 International licence](https://creativecommons.org/licenses/by/4.0/).

**Disclaimer**

Any resources such as texts, websites and so on that may be referred to in this document are provided as examples of resources that teachers can use to support their learning programs. Their inclusion does not imply that they are mandatory or that they are the only resources relevant to the course.

# 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 | **Task 1 Part A:** Design project one   * 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 * identify and assess existing solutions * research and critique materials and components relevant to the design brief |
| 10% | Semester 1  Weeks 4–8 | **Task 1 Part B:** Design project one   * identify and research examples of existing sources of energy * research differences and impacts of renewable and non-renewable energy   **Task 2:** Devise concepts for project one and select the best option for the solution   * identify and research parts, components, materials and energy sources/supplies * produce annotated pictorial drawings of ideas, in combination with annotated orthographic concept drawings * evaluate concepts and select the best option |
| 2% | Semester 1  Week 14 | **Task 5:** Evaluate completed project one   * evaluation report may have additional rating table, written conclusions, descriptions and suggestions for improvement |
| 2% | Semester 2  Weeks 1–3 | **Task 7:** 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.   * develop a comprehensive design brief – description of problem, incorporating researched examples of existing solutions, resulting in a list of requirements and restrictions |
| 10% | Semester 2  Weeks 4–9 | **Task 8:** Devise concepts for project two and select the best option for the solution   * identify and continue to research existing solutions * identify and research parts, components, materials and energy sources/supplies * produce annotated pictorial drawings of ideas * produce simple annotated orthographic concept drawings * evaluate concepts and select the best option |
| 2% | Semester 2  Week 9 | **Task 10:** Research and analyse the life cycle of an engineered product   * research and report on the stages of the life cycle of an engineered product * comment on the impacts of the product on society, business and the environment over the life cycle of the product |
| 2% | Semester 2  Week 14 | **Task 12:** Evaluate completed project two   * produce a written report on, and use photographs of, the completed project two * include a rating table, written conclusions, descriptions and suggestions for improvement |
| **Assessment  type** | **Assessment type  weighting** | **Duration** | **Assessment task** |
| Production  30% | 5% | Semester 1  Weeks 9–10 | **Task 3:** Produce specifications for the selected solution for project one   * working drawings – detailed orthogonal drawings * lists of materials, parts and components, estimated costing * develop production plan on a timeline |
| 10% | Semester 1  Weeks 10–13 | **Task 4:** Production of project one   * construct the proposed solution, using prepared production plan, materials and available equipment; record progress in design folio |
| 5% | Semester 2  Weeks 7–9 | **Task 9:** Produce specifications for project two   * working drawings – detailed orthogonal drawings * lists of materials, parts and components, costing * develop production plan on a timeline |
| 10% | Semester 2  Weeks 10–13 | **Task 11:** Production of project two   * construct the proposed solution, using prepared production plan, materials and available equipment * record progress in design folio |
| Examination  40% | 20% | Examination  Semester 1  Week 15 | **Task 6:** 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 | **Task 13:** 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%) |
| **100%** | **100%** |  | |