**Sample Assessment Outline**

Engineering Studies

ATAR Year 11

For teaching in 2024

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# 2024 Sample assessment outline

# Engineering Studies – ATAR Year 11

## Unit 1 and Unit 2

| **Assessment type and weighting** | **Assessment task weighting**  | **When/duration** | **Assessment task** |
| --- | --- | --- | --- |
| Design30% | 5% | Term 1Weeks 1–2 | Introduction to unit and course outline**Task 1 Part A:** **Design project** *(include title or theme)*Using a design process* Develop the first part of a design folio
* develop a design brief and investigate existing products, materials and ideas
 |
| 5% | Term 1Weeks 3–7 | **Task 2 Part A: Investigate energy, power and work*** research, list, define and compare forms of energy
* list and outline advantages and disadvantages for society, the environment and industry of obtaining and using renewable and non-renewable forms of energy

**Task 2 Part B: Investigate and understand the application of fundamental engineering calculations and mechanisms*** fundamental engineering calculations including content from: dimensional, perimeter, surface area, volume, use units of measurement and prefix, symbols and factors
 |
| 10% | Term 2Weeks 1–6 |  **Task 1 Part B: Developing a solution for the project*** through annotated pictorial drawings of ideas to a final drawn proposal
* calculations to estimate design parts, and costing

 **Task 1 Part C: Evaluation of the development of the project*** report on drawing, and plans for production of project
* meeting the requirements of the design
 |
| 5% | Term 3Week 4 | **Task 3: Obsolescence assignment*** define and compare forms of obsolescence – technical, functional, and planned
* describe advantages and disadvantages for society, industry and the environment from different forms of obsolescence
 |
|  | 5% | Term 4Week 6 | **Task 7: Evaluation of completed project – written report on and photographs of completed product*** evaluate the development of the project
* meeting the requirements of the design
* safety, function fit and finish
* modifications and changes to the design during production
 |
| Production40% | 10% | Term 2Weeks 1–5 | **Task 5:** **Pre-production*** lists of materials, parts and components
* develop production plan on a timeline
* develop production skills; apply safety and practice task/s to develop practical hand and machine skills
 |
| 30% | Term 3Weeks 8–10Term 4Weeks 1–5 | **Task 6: Manufacture of proposed project*** using prepared production plan, materials and available equipment, construct a prototype or working model and; record progress in design folio
* use project management skills for timely development and testing of the project
* construct prototype or working model by selecting and using appropriate tools and machines, and by following safe work practices
* test the prototype or working model for correct function and document using checklists and test data
 |
| Examination30% | 15% | Term 2 Examination week | **Task 4: Semester 1 examination**– of approximately 2 hours, using a modified examination design brief from the Year 12 syllabus |
| 15% | Term 4 Examination week | **Task 8: Semester 2 examination** – of approximately 2 hours, using a modified examination design brief from the Year 12 syllabus |
| Total | 100% |  |  |