

Subject name	Engineering
Subject code	EGN (General subject)
Additional Subject fee	\$20
Prerequisites	Minimum C Maths and C English

Course Overview

- To introduce students to the Senior subject - Engineering.
- To introduce students to the underlying concepts and principles of Engineering
- To gain knowledge of human factors, safety management and systems thinking that enable us to solve real-world problems using the problem-solving process in engineering systems.
- To use thinking habits, systems thinking strategies, technological knowledge, concepts and principles to explore problems and develop solutions.
- Draws on knowledge from science, technology, engineering and mathematics

Course Outline

- Introduction to engineering principles and systems
- Engineering fundamentals and society
- Emerging technology
- Statics of structure and environmental considerations
- Engineering machines and mechanisms
- Engineering Communication

Assessment

Projects (Folio), Practical Demonstrations and Exams

Subject Requirements

All students are to abide by safety rules and regulations and to have workshop PPE available when required (i.e. **fully covered leather shoes, protective glasses and hearing protection**).

Please refer to the Bring Your Own Device (**BYOD**) booklet - A laptop that is i5 Intel processing speed or faster. Purchase of **16GB USB** and a **display folder; Headphones**

Career Opportunities

Studying Engineering can lead to careers including, but not limited to: civil, mechanical, mechatronic, electrical, aerospace mining, process, chemical, marine, biomedical, telecommunications, environmental, micro-nano and systems.