

Engineering Studies

2 units for each of Preliminary and HSC
Board Developed Course
Exclusions: Nil

Course Description:

Both Preliminary and HSC courses offer students' knowledge, understanding and skills in aspects of engineering that include communication, engineering mechanics/hydraulics, engineering materials, historical/societal influences, engineering electricity/electronics, and the scope of the profession. Students study engineering by investigating a range of applications and fields of engineering.

Main Topics Covered:

Preliminary Course

Students undertake the study of 4 compulsory modules:

- three application modules based on engineering concepts and impacts through the study of engineering products. Engineering concepts and impacts are studied in each of the following categories: engineering fundamentals, engineering products and braking systems
- one focus module relating to the field of Biomedical engineering.

HSC Course

Students undertake the study of 4 compulsory modules:

- two application modules relating to the fields of Civil structures and Personal and public transport.
- two focus modules relating to the fields of Aeronautical Engineering and Telecommunications Engineering.

Particular Course Requirements:

Engineering Report

Preliminary Course

Students are required to produce a component of an engineering report in Engineering application module 3, Braking systems, and then a complete engineering report in Engineering focus module 4, Biomedical engineering.

HSC Course

Students are required to produce **one** engineering report from either of the two engineering application modules, and **one** from either of the two engineering focus modules.

One engineering report from the Preliminary course and one engineering report from the HSC course must be the result of collaborative work, reflecting the importance of teamwork for successful engineering projects.

Leather upper shoes required when working in a practical environment.