KINGSCLIFF HIGH SCHOOL
Subject Selection Information

KINGSCLIFF HIGH SCHOOL

ACHIEVEMENT THROUGH ENDEAVOUR

Faculty:
Industrial Arts & Computing Studies

Subject: Engineering Studies

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Classification of the Course:

Category A

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Nature of the Course

This is a unique academic course designed for students who have an interest in becoming an engineer or studying in related engineering fields either as a graduate engineer or at TAFE as an apprentice. Students develop knowledge and understanding of different engineering disciplines, whilst developing specialised mathematic, scientific and technological skills. Students entering into undergraduate engineering courses will benefit from the development of fundamental skills. Students entering the workforce will develop a greater awareness of different disciplines and learn skills and knowledge applied in these professions.

ENGINEERS AUSTRALIA

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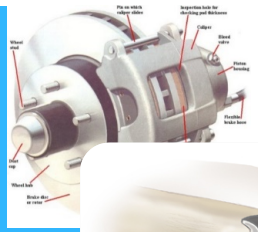
Nature of the Course

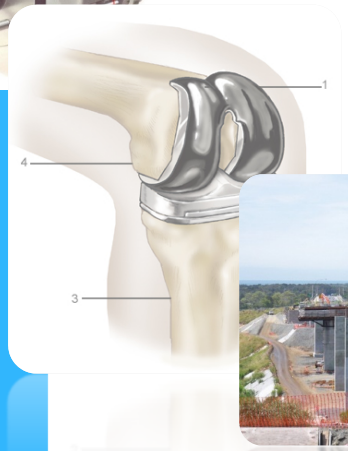
Preliminary units of work include:

- Engineering Fundamentals
- Engineered Products
- Braking Systems
- Biomedical Engineering

HSC units of work include:

- Civil Structures
- Personal and Public Transport
- Aeronautical Engineering
- Telecommunications Engineering





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HSC Exam: Yes

Length of Exam: 3 hours

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Internal Assessment Structure

Preliminary Assessment

Engineered Product Analysis
Biomedical Engineering Report
Yearly Exam

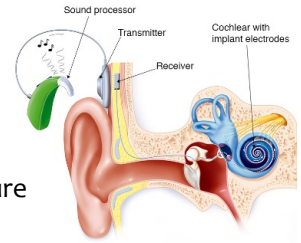
HSC Assessment

Civil Engineering Report
Personal and Public Transport Report
Aeronautical Engineering Report
Trial HSC Exam

Samples Studies

Lawnmower Engineering Report
- Disassemble
- Material Analysis
- Manufacture Method Analysis

Biomedical Report
- Material Analysis
- Manufacture method analysis



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Elective fees for the Course:

Nil

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Skills Required for this subject and/or any Prerequisites:

Students entering this course need to have a good understanding of mathematic and scientific concepts.

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Career Opportunities

By completing this course students will develop both general and specific knowledge as applied in different engineering disciplines. Students will develop management, problem solving, synthesis, communication and teamwork skills. These skills will enhance students confidence and ability to be able to work effectively as members of an engineering team in the workforce.

Students will also develop specific knowledge in material science, engineering mechanics (applied mathematics), engineering drawing, electronics and telecommunications. This provides students with core skills as applied to first year undergraduate engineering courses.

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Career Opportunities

* Aerospace Engineering
* Agricultural Engineering
* Biomedical Engineering
* Building Services Engineers
* Chemical Engineering
* Coastal and Ocean Engineers
* Civil Engineering
* Electrical Engineering
* Electronics and Telecommunications Engineering
* Environmental Engineering
* Food Engineering
* Geotechnical Engineering
* Hydraulic Engineering
* Industrial Engineering
* Marine Engineering
* Materials Engineering
* Mechanical and Manufacturing Engineering
* Mechatronics Engineering
* Minerals and Metallurgical Engineering
* Mining Engineering
* Petroleum and Petrochemical Engineering
* Pharmaceutical Engineering
* Process Control Engineering
* Production Engineering
* Resource Engineering
* Risk Engineering
* Software Engineering
* Structural Engineering
* Transportation Engineering