

What is Engineering?

Engineering is the application of Science and Mathematics to solve real world problems. Engineers figure out how things work and find practical uses for scientific discoveries. Advances in Technology whether it is with modern computers or the latest smart phones or Aerospace or advanced Materials, it is only made possible and it becomes a reality due to the input from Engineers.

Junior Cycle Engineering

Junior Cycle Engineering is what used to be referred to as Metalwork. But there have been some changes. The new syllabus is broken down into 3 strands. Each strand incorporates a number of different aspects of Engineering Principles



JUNIOR CYCLE ENGINEERING

Junior Cycle Engineering Syllabus

Strand 1 - Processes and Principles

- Processes
- Tools and Equipment
- Materials and Properties
- Engineering (General)

Strand 2 - Design Application

- Design
- Project Management
- Research Activities

Strand 3 - Mechatronics

- Mechanisms and Structures
- Electronics
- Computers and ICT
- Microbit

Key Dates / Documents:

Classroom-Based Assessments

CBA 1: Engineering in Action

The teacher's judgement is recorded for the purpose of subject learning and assessment review, and for the school's reporting to parents and students.

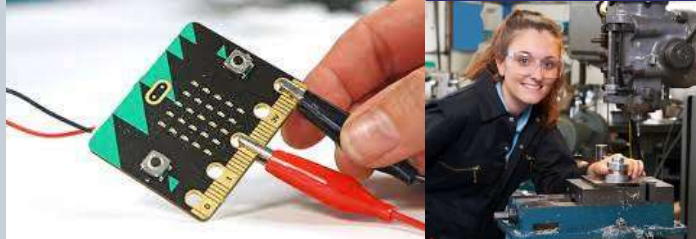
The CBA will be completed within a three-week period during term two of second year.

CBA 2: Research and Development

The teacher's judgement is recorded for the purpose of subject learning and assessment review, and for the school's reporting to parents and students.

This CBA will inform the student's work under the Project assessment.

The CBA will be completed within a three-week period during term one of third year.



Weighting

- Project 70%
- Will be specified and marked by the State Examinations Commission annually.
- Written examination 30%
- Set and marked by State Examinations Commission.