

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.

Leaving Certificate Engineering

Leaving Certificate Engineering is the study of mechanical engineering. There are two main areas of study: workshop processes, and materials and technology.



LEAVING CERTIFICATE ENGINEERING

What type of student would this subject suit?



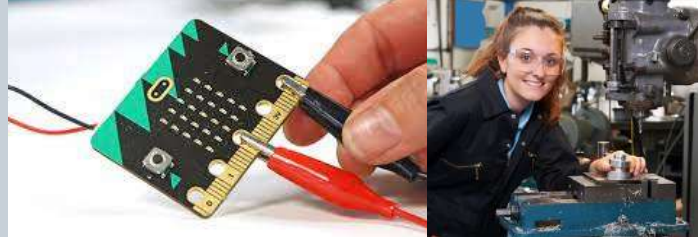
- Students should have an understanding for and an interest in design and practical work. This subject follows on from Junior Cert metalwork. Students should be 'hands-on' as they will be working with tools and machinery on physical things like metals and plastic. Also involves designing, planning and building projects.

Course overview

Engineering promotes an educational understanding of the materials and a knowledge of the processes associated with mechanical engineering. This is achieved through the development of skills and initiative in the planning, development and realization of projects in a safe manner.

Exam structure

- Workshop Processes: This section carries 50% There will be 25% for a practical exam and 25% for a design and make project.
- Materials & Technology: this is the written exam this section will carry 50% .



Course content

- Health and Safety
- Bench work
- Structure of metals
- Fabrication and finishing of metals
- Plastics processing
- Machining
- Materials testing
- Joining of materials
- Manufacturing processes

Career possibilities:

- Mechanic
- Panel Beater
- Welder
- Plumber
- Electronic and Mechanical Engineering
- Architecture
- Aircraft Technician Army/Air Corps
- Industrial Design