

BTEC Level 3 Engineering

Certificate in Engineering (30 credits)
Subsidiary Diploma in Engineering (60 credits)

Contact: Miss Y. Howells



Engineering

Course Content and Structure

This course offers a vocational qualification that focuses on particular aspects of engineering. It covers the key knowledge and practical skills required to succeed in engineering:

- Key features of health and safety legislation and regulations and how these are applied in engineering to ensure safe working conditions.
- Mechanical principles and how to apply them when solving engineering problems.
- Specialist techniques found in engineering that are used to machine or finish complicated shapes.
- Processes used to safely measure, mark out, cut, form and assemble fabricated structures using sheet metal.
- Manual, mechanised and machine-based welding processes, including laser, friction and resistance welding.
- Set up and use a range of traditional and specialist secondary processing machines to produce components

Certificate in Engineering (30 credits)

In the first year you will have three units to complete.

Mandatory units:

- Health and Safety in the Engineering Workplace
- Mechanical Principles and Applications

1 Optional unit:

- Fabrication Processes and Technology
- Welding Technology

Each unit gives 10 credits and 180 guided learning hours

Subsidiary Diploma in Engineering (60 credits)

In the second year you will need to complete three more optional units (not already selected in the previous year)

3 Optional units:

Fabrication Processes and Technology
Welding Technology
Engineering Secondary and Finishing Techniques
Setting and Proving Secondary Processing Machines

Progress at 18+:

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| Research | Project management |
| Design engineering | Development and testing |
| Manufacturing (Welding and Fabricating) | Marketing |
| Quality assurance | Customer services |
| Materials development | Business management |

Engineering