

Engineering

Note: This BTEC Level 3 Engineering Subsidiary Diploma course is not currently taught in Foyle, but may be available in another school.

Engineering is a well-respected profession. It is well paid and with skills in Science, Technology, Engineering & Mathematics (STEM) in short supply, there are plenty of job opportunities on offer. Many of these jobs will involve international travel, high level business negotiations, and call for considerable leadership skills.

During the next two years, students will complete a range of unit based assignments, chosen to maximise their opportunities at higher and further education or in the workplace. Another important element of the teaching and learning experience is the provision of industrial visits. These visits will provide students with invaluable first-hand knowledge and experiences that will assist them in the research and completion of various assignments.

DEPARTMENT OVERVIEW

There are three members of staff involved in the delivery of the BTEC units in engineering. Two teaching staff namely, Mrs A. McCrudden (Head of department), Mr G. White and one member of support staff Mr R. Baird.

Resources

The Engineering Department consists of a classroom with a set of computers which enables students to work on assignments. Manufacturing facilities are shared with the Technology and Design Department.

The School library has copies of appropriate printed and online support materials. Students will have a course text, designed specifically for this course and published by the examining body.

In addition, students will require a dedicated Engineering folder/writing pad, memory stick and access to a computer/printer for unit assignment activities.

COURSE OVERVIEW

The BTEC Level 3 Subsidiary Diploma involves the delivery of six units over approximately two years. Each unit is worth 10 credits – 60 credits in total. The final qualification is equivalent to one A-Level.

There are no final examinations – only coursework assignment outcomes are used to calculate final results.

At least three units will be delivered per year. The number, duration and complexity of unit assignments will vary from unit to unit.

Nine thirty-five minute Teaching and Learning periods are available per week; this translates into three periods per unit per week.

The main course units are outlined below.

Year One

Unit 1 - Health and Safety in the Engineering Workplace

Unit 4 - Mathematics for the Engineering Technician

Unit 6 – Electrical and electronic principles

Year Two

Unit 12 – Application of mechanical systems in engineering

Unit 16 – Engineering Drawing for Technicians

Unit 22 – Fabrication process and technology