Engineering BTEC (Extended Certificate)

Why should I study this subject?

The Pearson Level 3 BTEC National in Engineering (Extended Certificate) is an Alternative Academic Qualification (AAQ) and is equivalent to one A Level. This subject is ideal if you would like to study an applied subject in addition to other BTECs and A Level qualifications such as a Science, Maths or IT and have an interest in either employment or further study in the engineering sector; perhaps in a higher apprenticeship at age 18 or progressing onto a degree in a technical or scientific subject.

What will the student study as part of this qualification?

The qualification has been developed in consultation with higher education representatives and professional bodies to ensure students have the knowledge, understanding and skills they need to progress to, and thrive in, higher education.

The qualification has four mandatory units covering the following topics:

Unit 1 - Engineering Principles: Engineering data and applying mathematical procedures in mechanical and electrical contexts.

Unit 2 - Engineering Applications: Advances in modern technology and how they are reshaping the engineering sector's function; materials and processes to devise sustainable solutions to engineering problems.

Unit 3 - Engineering Design: Three-dimensional (3D) models and two-dimensional (2D) detailed drawings using a computer-aided design (CAD) system.

Unit 4 - Engineering Project: Project management processes in Engineering products from concept to solution.

What will this subject lead to?

BTEC Engineering offers a great foundation for entry into mechanical, electrical or marine engineering careers from technician level and a good starting point for higher education qualifications in this field. If you know you would like to enter a technical career but are unsure which field to go into, this subject would also give a good foundation to help inform your choices for post 18.

How will I be assessed?

Assessment will be through a combination of externally assessed examinations (Units 1 & 2) and internally assessed 'coursework' assignments (Units 3 & 4).

Entry Requirements

It is a level 3 technical qualification so there is a high degree of technical, written, science and maths content mixed with some practical assignments and tasks. Mathematics GCSE grade 5 (higher tier) is a minimum requirement.

