

# Engineering

**BTEC National Level 3 Extended Certificate** (Equivalent to 1 x A-level)

**Examination Board: Edexcel**

## Aims of course:

This qualification is aimed at learners preparing for future roles in the engineering sector such as higher level apprenticeships or progression to an engineering degree course. It has been designed as part of a two year programme of study and is normally taken in conjunction with two or more qualifications at level 3. It is aimed at giving learners a wider view of the sector including elements of mechanical, electrical and manufacturing engineering.

## Programme of study

Learners will complete **4 units** over the course of the two years.

Level	Module Name	Module Description
Year 1	Unit 1 (Mandatory)*	Engineering Principles
Year 1	Unit 3 (Mandatory)*	Engineering Product Design and Manufacture
Year 2	Unit 2 (Mandatory)	Delivery of Engineering Processes Safely as a Team
Year 2	<b>One optional unit from the list shown below**</b>	
	Unit 10	Computer Aided Design in Engineering
	Unit 12	Pneumatic and Hydraulic Systems
	Unit 19	Electronic Devices and Circuits
	Unit 25	Mechanical Behaviour of Metallic Materials
	Unit 40	Computer Aided Manufacturing and Planning

\*Externally assessed unit. \*\*List of optional units may be subject to change.

## Approaches to learning:

This is a vocational programme which gives the learner the academic theory, practical skills, and workplace understanding they need to be ready for progression to employment and/or higher education. Our teaching and learning is built around engineering challenges set by our challenge partners.

## Who is this course aimed at?

This qualification is designed for learners who want to expand their understanding of the core academic principles of engineering across a diverse range of topics whilst study for another level 3 qualification such as A-level Mathematics or Product Design. It is aimed at learners looking to progress to higher level apprenticeship schemes and also further engineering study at university.

## Minimum entry requirement:

**Five GCSEs at grade 9-5, including Mathematics and English.**

*The units are assessed through a mixture of internal and external assessments over the course of the 2 years.*