

# ENGINEERING



<b>Course Title:</b>	BTEC L3 Engineering	<b>Course Code:</b>	601/7588/6
<b>Exam Board:</b>	Edexcel	<b>Course Length:</b>	2 years

## Units Covered:

- Engineering Principles
- Delivery of Engineering Principles Safely as a Team
- Engineering Product Design & Manufacture
- Applied Commercial & Quality Principles
- Specialist Engineering Project
- Microcontroller Systems for Engineers
- Calculus to Solve Engineering Problems
- Computer Aided Design
- Hydraulics & Pneumatics
- Electronic Printed Circuit Board Design & Manufacture
- Non Metallic Materials
- Maintenance of Mechanical Systems
- Metallic Materials
- Additive Manufacturing Processes
- Electrical Power Distribution

## PROGRESSION

Students who gain a BTEC Extended Diploma in Engineering are held in high regard by various engineering companies and apprenticeship providers as they will have both good theoretical knowledge and evidence of developing practical skills. The course incorporates two Mathematics units, enabling students to progress into studying Engineering at university. This subject can lead to careers in: Mechanical Engineer, Electrical Engineer, Electronic Engineer, Chemical Engineer, Aeronautical Engineer, General Engineering, CAD Technician, Sports Engineering Designer and Process Engineer.

## HOW AM I ASSESSED?

- The course is split into modules with each module being assessed upon completion. Therefore there will be multiple assessment points throughout the year.
- There are three external assessment modules and these will be assessed in either January or May of each year.
- The attained grades for each module will be combined to give an overall grade for the course.

## HOW TO BE SUCCESSFUL?

- Complete all units of work within the set time frame.
- Undertake background reading around the subject to build up engineering knowledge.
- Practise workshop activities to develop your skills and understanding of various types of manufacturing.
- Extend your own learning and development via research to ensure knowledge is in place for examinations.

6 X NATIONAL  
AVERAGE

HIGH QUALITY STEM  
APPRENTICESHIP

AVERAGE GRADE

DOUBLE DISTINCTION

## WHY ENGINEERING?

The Engineering Sector domestically and internationally is regarded as vitally important as there are many different engineering pathways to choose from to help develop the National and International Economy. Opportunities are available to gather experience across a broad range of sectors and cultures worldwide.