

Engineering Level 3

The BTEC Level 2 First Extended Certificate in Engineering will allow you to prepare for a career in the Engineering Sector, whether this is electrical/electronic or mechanical.

Students will gain an understanding of the industry in general as well as an insight into the various career options.

We have strong links within the industry such as Keltbray, AM Garden Machinery and Red Engineering Design to name a few.

Waltham Forest College is putting sustainability at the heart of everything that we do, and in this course, you will explore how the carbon footprint of large and commercial developments can be reduced through coordinating different sustainable technologies, and how processes such as Building Information Modelling (BIM) can help with sustainability.

The course is scheduled for 3 days per week and has a mixture of practical and theory work.

- [Sector Overview](#)

The Engineering and Manufacturing Sector provides huge scope for technical-minded problem solvers. If you have the right qualifications and skills, employers are in desperate need of your talents.

Engineering is about problem solving and applying innovations to the real world, focussing on the design, building, maintenance and use of engines, machines and structures. On the other hand, Manufacturing is the large-scale production of products or goods that are then sold on to a customer.

The Engineering and Manufacturing Sector is one of the UK's broadest and includes a range of disciplines such as, electrical, electronic, mechanical, civil, structural and many more.

The Engineering Council reports up to 6.9 million people work in the sector in the UK. Combining this with a future growth projection means this is a fantastic time to enter the industry.

- [Entry Requirements](#)

The entry requirement(s) for this course are:

- 5 GCSEs at Grade 4 (C) or above including maths at Grade 5 and English
- Assessment and interview

- [What will I study?](#)

This course consists of the following modules:

Disclaimer:

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- Engineering principles
- Delivery of engineering processes safely as a team
- Engineering product design and manufacture
- Applied commercial and quality principles in engineering
- Calculus to solve engineering problems
- Computer Aided Design (CAD) in engineering
- Electronic devices and circuits
- [How will I be assessed?](#)
You will be assessed via:
 - Written exams
 - Online exams
 - Written assignments
 - Practical activity
 - Project based assessment
- [Enrichment](#)
To further enhance your progression, you will actively participate in internal and external skills competitions, such as UK SkillBuild.
You will take part in trips and visits, and you will have access to key employers that deliver guest lectures to help build your industry knowledge and contacts. Examples are Chartered Engineer Yewande Akinola and Mace Group.
As part of your course, you will learn about employability and sustainability which will provide you with the most up-to-date knowledge to gain work within the industry.
- [Work Experience](#)
You must complete 36 hours (1 week) of external work placement which is an essential part of the programme. Some of the opportunities will include placements such employers such as Keltbray, AM Garden Machinery, Red Engineering Design and Morgan Sindall.
- [Progression opportunities](#)
Successful completion of this course will lead to:
 - BTEC National Extended Certificate (Electrical or Mechanical Pathway)
 - Apprenticeship training programmes
 - University
 - Employment
- [Alumni](#)
Waltham Forest College is a vibrant and aspirational college and will support you to reach your career aspirations. Last year 96% of learners progressed onto a positive destination either to higher levels of study, employment, or an Apprenticeship.

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