

Higher National Diploma in Engineering (Electrical and Electronic Engineering)

This course is designed for 19+ adults.

The BTEC Higher National Diploma in Engineering qualification will allow you to work as a technician or technician engineer in electrical and electronics design, manufacture, maintenance, testing or fault finding.

This is a 2-year course.

*This course will run from October 2023, subject to validation. All students will be registered by London Metropolitan University.

All Higher Education courses taught in partnership with London Metropolitan University undergo a rigorous process of approval before students can enrol. The partnership and courses are currently going through the approval / validation process. Partnership and course approval / validation involves external subject experts and academic staff from across the University and Waltham Forest College. Courses are reviewed and revalidated every three to five years. For further information regarding the approval status of this course please contact myfuture@waltham.ac.uk

- [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 requirements for this course are:

- GCSE English and maths at grades A* (9) to C (4) or equivalent is strongly recommended.
- You must have a Level 3 qualification such as BTEC Level 3 Diploma, Access to HE Diploma, or A-Levels in a related subject.
- Related work experience

If you have international qualifications, you must:

- Hold the equivalent of the above Level 3 qualifications.
Satisfy the minimum English requirement: Common European Framework of Reference (CEFR) level B2; PTE Academic 51, or IELTS 5.5 (reading and writing must be at 5.5).
- You will be required to attend an informal interview which may include completing an assessment based on

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your prior qualifications and provide a statement ahead of your interview.

Registrations will be made by London Metropolitan University.

- What will I study?

This course consists of the following modules:

Year 1:

- Engineering design
- Engineering maths
- Engineering science
- Managing an engineering project
- Electrical principles
- Electrical systems and fault finding
- Electronic circuits and devices
- Renewable energy

Year 2:

- Research project
- Engineering management
- Further mathematics
- Electronic storage
- Industrial systems
- Sustainability
- Electronic principles

- How will I be assessed?

You will be assessed via:

- Practical assessments
- Data analysis
- Case studies
- Examinations
- Both open and closed book
- Reflective activities
- Written reports
- Presentations

- Enrichment

Our Student Common Room is a great place to unwind and relax during your breaks. It features pool tables, table tennis, a gaming corner and lots of comfy sofas so you can refresh before your next lesson.

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Themed events are held in the Common Room so you can get the best experience of being a Waltham Forest College student.

- [Work Experience](#)

You will be offered opportunities to actively engage with industry related employers and take part in experiential events to improve your personal development.

- [Progression opportunities](#)

Year one of this course is the equivalent to a HNC, covering the Level 4 modules needed to work towards the HND.

On completion of the Higher National Certificate in Engineering, learners can continue their studies into the Higher National Diploma qualification:

- The Pearson BTEC Level 5 Higher National Diploma allows students to specialise by committing to specific career paths and progression routes to degree-level study.

On successful completion of the Higher National Diploma, students can develop their careers in the engineering sector through:

- Entering employment
- Continuing existing employment
- Linking with the appropriate professional body
- Linking with the appropriate vendor accredited certificates (if appropriate)
- Committing to Continuing Professional Development (CPD)
- Continue their studies by completing a degree in engineering through the London Metropolitan University.

- [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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