

Engineering

Engineering Electrical/Mechanical (Mechatronics) Level 3 Extended Diploma Full-time

In Brief

Start Date

This two year study programme starts in September

Entry Requirements

- Four GCSEs at grade 4/C or above including English and science **plus** maths at grade 6/B or above **or** successful completion of the Level 3 Diploma in Engineering

You will achieve

Year One: Foundation Diploma Level 3 in Mechanical (Mechatronics)/Electrical Engineering

Year Two: Level 3 Extended Diploma in Mechanical(Mechatronics)/Electrical Engineering

Course Overview

Mechanical engineers develop and design components and machinery used in many industries like manufacturing, construction, water, power, health and transport. They also manage teams of technicians and craftspeople who carry out installation and maintenance work.

As an engineer, you will design and oversee the manufacturing of many products ranging from medical devices to new batteries.

Mechanical engineers design power-producing machines such as electric generators, internal combustion engines, and steam and gas turbines as well as power-using machines, such as refrigeration and air-conditioning systems. Mechanical engineers design other machines inside buildings, such as elevators and escalators. They also design material-handling systems, such as conveyor systems and automated transfer stations. If you are technically minded, good at maths and science, and like solving problems, a professional career in engineering could be a great move for you.

Electrical engineers design, build and maintain electrical control systems, machinery and equipment. If you are good at maths, science and IT, and you want a career in engineering,

this could be an ideal option for you. You will need to be good at solving problems, structuring your workload and enjoy working as part of a team.

The course combines both areas to provide learners with the best possible skills and knowledge for Further Education and/or Employment

Course Content

Following along similar course themes as the level 3 diploma in Engineering, the extended diploma provides you with added further academic study and further principles in all areas of Engineering. This course is chosen by learners who have achieved a high standard of GCSE results especially in Maths and wish to progress onto Higher Education.

The programme is divided into a range of units of study at Level 3 including:

Electrical

- Selection and application of programmable logic controllers
- Principles and applications of electronic devices and circuits
- Electrical technology

Mechanical

- Programmable Logic Controllers (PLCs) and robotics
- Welding principles/technology
- Manufacturing systems technology

How will I be assessed?

Assessment is through practical and coursework. There are three exams to take

What Equipment Will I Need?

You will require a ring binder, a calculator, textbook and general stationery.

Where will I study?

Science, Technology, Engineering and Maths (STEM) Centre
Old Mill Lane
Barnsley
S70 2LA

What can I do next?

Employment: This course can form the foundations for future study and work as Engineer and other related roles.

Education: Many students continue with higher level qualifications such as a BEng Degree or Higher National Diploma in Engineering.

For career aspirations in engineering please visit <http://educatingengineers.com/career-specialties> [<http://educatingengineers.com/career-specialties>]

How much does the course cost?

16 – 18 year olds

Full-time Barnsley College students aged 16-18 years old do not have to pay tuition fees.

19+ Students

Aged 19 or over and thinking about further education? You may be eligible for free or reduced course fees . Please refer to our page '[paying for your course.](#)'

Financial support

You may be eligible for assistance with expenses such as travel, books, equipment and childcare. For further information please contact the Student Services Team on +44 (0)1226 216 114.

Extra information

Advanced Learner Loans

This course may be eligible for an Advanced Learner Loan. Contact our friendly Information Team on +44 (0)1226 216 123 or email info@barnsley.ac.uk [mailto:info@barnsley.ac.uk] . about eligibility and how to apply. You can also visit the Advanced Learner Loan [<https://www.barnsley.ac.uk/courses/paying-for-your-course/advanced-learner-loans/>] page.

Contact the Information Unit

For further information please contact our friendly Information Team on +44 (0)1226 216 123 or email info@barnsley.ac.uk [mailto:info@barnsley.ac.uk]

Want to join Barnsley Sports Academy and the Sports Village?

Barnsley College has a range of sports opportunities for all students to take part in, gain professional training and compete nationally and internationally. We also have a state-of-the-art fitness village, Honeywell Sports Village [<https://www.barnsley.ac.uk/shops-services/honeywell-sports-village/>] where students can make use of our fitness suite, spinning studio and classes for competitive rates. You don't have to be studying sport to get involved in the Sports Academy [<https://www.barnsley.ac.uk/our-departments/sport/sports-academy/>] .

Additional Learning Support

Our Additional Learning Support team can provide you with the support you need. Please contact them on +44 (0)1226 216 769.

Disclaimer

Please note we reserve the right to change details without notice. We apologise for any inconvenience this may cause.

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Want to apply?

Visit <https://www.barnsley.ac.uk/apply> to get started

Call us on **01226 216 123**