

Engineering

Engineering T Level Foundation Level 2 Full-time

In Brief

Start Date / Duration

The course will start in September and runs for one year.

Entry Requirements

Four GCSEs at grade 4 or above including English and Maths.

Due to the technical content of the course, the above are recommended entry requirements.

You will achieve

BTEC Level 2 First Diploma in 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.

Course Content

Mechanical Engineers develop and design components and machinery used in many industries such as manufacturing, construction, water, power, health and transport.

You will have the opportunity to study in one of our Academies. The aim of the Academy is to develop your knowledge in order to prepare you for a successful career in the engineering industry.

Course Themes:

- Machining
- Fabricating
- Electronics
- Welding
- Maintenance
- Computer Aided Design (CAD)
- Engineering Design
- Electronics
- Mathematics for Engineering
- Materials
- Engineering Project
- Health and Safety in Engineering

For more information, please visit the awarding body course specification page

https://qualifications.pearson.com/content/dam/pdf/BTEC-Firsts/Engineering/2012/Specification-and-sample-assessments/BTECFIRST_CECD_ENG_SPEC_ISS4.pdf [https://qualifications.pearson.com/content/dam/pdf/BTEC-Firsts/Engineering/2012/Specification-and-sample-assessments/BTECFIRST_CECD_ENG_SPEC_ISS4.pdf]

How will I be assessed?

Assessment is through practical and coursework

What Equipment Will I Need?

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

See what careers are available in the Engineering [<https://www.barnsley.ac.uk/app/uploads/2023/10/Engineering-careers-2023-24.pdf>] sector. Use our online careers tool, Career Coach [<https://barnsley.lightcastcc.com/?radius=®ion=Barnsley>], to find out what your next steps could be.

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 Level 3 in Engineering

How much does the course cost?

If you are aged 16-18, you do not need to pay for this course.

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 216 267.

Extra information

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.

English and Maths

Having good English and Maths qualifications are important for most careers and we want to give you the help you need to succeed.

If you are aged 16 – 19 and don't already have a grade C/4 or above in GCSE English and Maths they will automatically be included in your study programme. If you want to work towards higher grades in English and Maths we can help you do that too.

Need a higher level Maths qualification? We offer a [Level 3 Mathematical Studies \(Core Maths\)](#).

This can be added to your study programme.

If you need any further information, please contact our friendly [Information Team](#).

Disclaimer

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

Last updated: 12th December 2023

Want to apply?

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

Call us on **01226 216 123**