

## Manufacturing or Mechanical Engineering Pearson Level 4 Higher Technical Qualification

Study Mode: Full-time | Course Level:

### Is this course right for me?

If you have completed your engineering qualification or apprenticeship and want to progress further in your career, are working as an engineering operative and want to improve your skills, or want to move up the career ladder into a supervisory or management role in the industry, a higher technical qualification (HTQ) is a great next step.

HTQs were introduced in 2023 and are a great option if you're looking to gain more technical knowledge in your chosen field and are developed by employers to be career-focussed, focus on practical and technical skills, and are flexible and adaptable so that you can fit studying around other commitments.

With two pathways on offer - manufacturing engineering and mechanical engineering - you will study a range of mandatory modules, as well as a choice of specialism-specific modules which best suit your interests and future career plans.

\*\*\* Advanced Technology and Automotive Centre now open!\*\*\*

You will train at the new £8.1 million purpose-built [Advanced Technology and Automotive Centre](#) at the [Wellington Road campus](#), in Bilston, which boasts dedicated engineering workshops kitted out with industry-standard equipment including fabrication and welding suites, a specialist CAD room featuring AutoCAD and SolidWorks software, CNC milling machines, lathes, 3D printers, mechatronic t-rigs and a laser cutter.

### Entry Requirements

To access this course you are required to have one of the following qualifications:

- BTEC Level 3 Extended Diploma in Engineering (grade MMP or above)\*
- BTEC National Level 3 Diploma in Engineering (grade MM or above)\*
- T-Level in Engineering
- A Level in Mathematics and Physics (grade C or above)
- City & Guilds Electrical Installation or Electrical Electronics qualification at Level 3
- Access to HE in Engineering\*

\* including the Electrical Principles and Further Mathematics for Technicians' modules

You may also apply for the course if you have:

- Engineering BTEC National Diploma (Pass)
- Science BTEC National Diploma (Pass)
- Science Access to Higher Education Diploma
- Suitable industrial experience and other STEM-related qualifications.

- Previous engineering experience and you complete a mathematics for engineering bridging module.

## **What will I learn?**

During the course you will study the following mandatory modules:

- Analytical methods
- Engineering design
- Engineering mathematics
- Engineering science
- Managing projects
- Mechanical principles
- Robotics and automation
- Thermodynamics
- CAD/CAM

In addition, you will have the opportunity to study a range of optional modules depending on the pathway you choose to follow.

## **What skills will I gain?**

Throughout the course you will:

- Further develop your understanding of engineering principles.
- Further develop your understanding of manufacturing/mechanical principles.
- Gain an in-depth understanding of technical information and its application in a working environment.
- Learn how to apply theoretical knowledge to solve engineering problems.
- Understand the relevance and implications of a range of manufacturing processes.
- Analyse and design engineering solutions, including the use of/further developing your understanding of CAD software.
- Develop an appreciation of leadership roles in the engineering industry.

## **How will I be assessed?**

Throughout the course you will be assessed in the following ways:

- Observation
- Written assessments
- Assignments
- Research
- Practical tasks
- Exams

## **What can I do next?**

Successful completion of the course will enable you to progress to:

- Employment in the engineering industry
- Pursue an engineering apprenticeship
- Top-up to an engineering Higher National Diploma (HND) or Level 5 HTQ
- Engineering degree at university

## Why study with us?

You will train at our new state-of-the-art Advanced Technology and Automotive Centre at the Wellington Road campus in Bilston - due to open in September 2024 - an industry-standard learning centre which will be equipped with a range of equipment including millers, lathes, CNC tooling, 3D printers and laser cutters, as well as fabrication and welding equipment such as TIG, MIG and ARC welders, and CAD suites.

## Delivery

**Location:** Wellington Road Campus

**Start Date:** 02/09/2024

**Day:** Various

**Time:** 2 days per week

**Course Fee:** £5,500

**Course Code:** X0024

**Study Mode:** Full-time

Apply online: [www.wolvcoll.ac.uk/apply](http://www.wolvcoll.ac.uk/apply)