

## Engineering (RQF) Pearson BTEC Level 4 Higher National Certificate (HNC)

Study Mode: Part-time | Course Level: 4

### Is this course right for me?

If you have completed your engineering 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, an HNC is a great qualification to have.

The HNC is mainly a theory-led classroom-based course which will give you the skills, knowledge and confidence to achieve your ambition or move on to further study such as an HND or university degree.

There are two pathways on offer - manufacturing engineering and mechanical engineering and throughout the programme 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.

### Entry Requirements

To access the course you are required to have:

- Level 3 BTEC engineering qualification OR
- T Level in Engineering qualification OR
- Relevant industry experience with Level 3 maths\*

You will also be required to attend a college interview and assessment.

### What will I learn?

During the course you will study a selection of the the following mandatory modules:

- Manufacturing processes
- Manufacturing planning and scheduling principles
- Manufacturing operations mathematics
- Business improvement techniques for engineers
- Engineering design
- Engineering maths
- Engineering science
- Managing a professional engineering project

In additon, you will study a number of specialist modules from the following selection:

#### Manufacturing Engineering

- Lean techniques for manufacturing operations

- Creating and managing projects in manufacturing operations
- Programmable logic controllers (PLCs)
- Mechatronic systems in manufacturing
- Engineering design
- Engineering science
- Managing a professional engineering project
- Instrumentation and control systems
- Quality and process improvement
- Computer aided design and manufacture (CAD/CAM)

## Mechanical Engineering

- Digital principles
- Electrical and electronic principles
- Instrumentation and control systems
- Mechatronics
- Production engineering for manufacture
- Electro, pneumatic and hydraulic systems
- Mechanical principles
- Fluid mechanics
- Production engineering for manufacture

## What skills will I gain?

By studying this 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
- 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?

Completion of the course will enable you to :

- Work in the industry as a manufacturing engineer or design engineer
- Gain a management or supervisory role in the industry
- Progress to a higher level qualification such as an HND or university degree

## Why study with us?

Tutors on the course are all qualified engineers – at degree level or above – have extensive experience of working in the industry.

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:** 30/09/2024

**Day:**

**Time:**

**Course Fee:** £2750

**Course Code:** Q2101

**Study Mode:** Part-time

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