

## EVERYONE HAS AN INNER GENIUS

We can help  
you find yours



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# HNC Mechanical Engineering

If you are creative and a natural problem solver, then mechanical engineering could be your perfect career choice.

### COURSE OVERVIEW

The Higher National Certificate in Mechanical Engineering is a tried and tested programme which combines academic study, with the students own work based development of practical skills, in order to achieve a higher level qualification. The purpose of the qualification is to equip students with the knowledge and skills necessary to develop their careers from technician level to more senior positions within their employment. The course will put an emphasis on applied learning, developing skills and knowledge and applying these within the workplace.

### MODULES

You will study a selection of the following modules according to staff availability and student preference, modules may be subject to change.

#### - Further Mathematics for Engineering Technicians

A preparation mathematics module that is taught across all of our HNC programmes to provide a good base and preparation for the Analytical Methods module.

#### - Analytical Methods

A mathematics module, taught across all HNC programmes, providing contextualised analysis of mathematics in engineering situations.

#### - Engineering Science (Mechanical and Electrical)

A science module, taught across all HNC programmes, to provide a good general engineering science base for any engineering subject.

### LOCATION

#### WORCESTER

WMEN-HC4HE-2022

### LOCATION

Worcester

### COURSE LENGTH

18 months (part-time)

### AWARD ON SUCCESSFUL COMPLETION

Pearson HNC Mechanical Engineering

### HOW TO APPLY

Please apply through our website at [www.howcollege.ac.uk](http://www.howcollege.ac.uk)

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### - **Advanced Computer Aided Design (CAD)**

A design module taught using the 3D modelling software Solidworks.

### - **Application of Pneumatics and Hydraulics**

This module is taught using simulation software that explores pneumatic and hydraulic circuits to industrial standards. The use of Programmable Logic Controller (PLC) controls will also be investigated.

### - **Materials Engineering**

This module will provide an understanding of the properties, selection, processing and failure of engineering materials.

### - **Mechanical Principles**

This module will develop the understanding of an extended range of mechanical principles that underpin the design and operation of mechanical engineering systems.

### - **Project Design, Implementation and Evaluation**

Usually a work-based project to develop skills of independent enquiry demonstrating project management skills relevant to the students own employment and ambitions.

### **ENTRY REQUIREMENTS**

Level 3 qualification in a suitable discipline or for mature students relevant industrial experience may be considered.

### **DELIVERY INFORMATION**

Part-time classroom based delivery from 08.45 to 17.30 one day per week (day to be confirmed).

### **METHODS OF ASSESSMENT**

A range of assessment techniques which may include; written assignments, examinations, work-based projects and verbal presentations. In addition to this you are expected to complete an average of 3 hours independent study per week.

### **STAFF EXPERIENCE**

The course will be delivered by a blend of experienced staff that have a wide and extensive range of qualifications and vocational knowledge. All staff have industrial experience in their chosen focus of study and complete frequent scholarly activities to update their knowledge and skills.

This breadth and depth of module specific knowledge and experience allows the team to introduce the modules using innovative approaches and vocational context in the classroom which emulates with work based learners.