

LEVEL 4 HNC MECHANICAL ENGINEERING (HTQ)

Subject Area

Student Type

Study Mode

Construction &

Construction Trades

Students aged 16-18

Part Time

What is the course about?

This Level 4 Mechanical Engineering qualification prepares students for employment in the engineering sector or further study at university.

The course develops a broad range of core mechanical engineering knowledge and skills, giving students an understanding of key engineering principles, advanced mathematics, engineering design, thermodynamics, fluid mechanics, and manufacturing processes. The qualification also includes project-based work, enabling students to apply their technical knowledge and practical skills to real-world engineering challenges.

Students who are already employed in the engineering sector will be able to study for a qualification that will support their career progression by fostering the technical and transferable skills required.

This is a part-time course taught over two years.

Why should I choose the course?

Working closely with employers, this mechanical engineering course delivers a modern, industry-relevant curriculum that equips higher education students with the knowledge and skills valued by employers.

The course combines theoretical and practical elements which are delivered using a range of assessment methods, including reports, presentations, academic essays, and work-related projects. Various industry-based software packages and test equipment are used to enhance practical and employability skills. Please note there are no exams during this course.

Higher level students have access to specialist facilities and resources to support their programme of study as well as designated learning spaces to support independent study. Tutorials will present you with the opportunity for focused one to one support. Google Classroom (your Virtual Learning Environment) is an invaluable aid to your studies acting not only as a repository for taught material but also for the setting of formative assessment such as quizzes.

Further reading and research support will also be provided in the Google Classroom along with a copy of your programme documentation such as the Programme Handbook.

What will I learn?

On this Level 4 Mechanical Engineering qualification, you will complete the following units:

- Unit 4001: Engineering Design
- Unit 4002: Engineering Maths
- Unit 4004: Managing a Professional Engineering Project

Note: This is a Pearson-set unit.



**Warrington
& Vale Royal
College**

Warrington Campus
Winwick Rd, Warrington WA2 8QA

 wvr.ac.uk

 01925 494 494

Winsford campus
Weaver St, Winsford CW7 4AH

 learner.services@wvr.ac.uk

- Unit 4008: Mechanical Principles
- Unit 4011: Fluid Mechanics
- Unit 4013: Fundamentals of Thermodynamics and Heat Engines
- Unit 4014: Production Engineering for Manufacture
- Unit 4017: Quality and Process Improvement

Various industry-based software packages and test equipment are used during the course to enhance practical and employability skills.

What will the course lead on to?

Achieving a level 4 mechanical engineering course supports progression onto a related university degree. Alternatively, the course also supports direct entry into employment as an engineer or technician in a wide variety of industries.

The course could also improve career development prospects for those already employed in industry.

Are there any links with industry and university?

We have close links with a number of employers and organisations who share their industry expertise with students and work with us to deliver workshops and guest lectures.

These valuable relationships have been developed over many years by our dedicated staff to ensure that the information and knowledge shared with students is directly relevant to their chosen course of study. They also help ensure that the curriculum reflects current industry needs, addressing skills gaps and preparing students for the demands of the modern workplace.

What support is available?

We have a team of staff dedicated to providing learning support if it is required and a Wellbeing Team that are on hand to offer guidance, support and help when needed.

Additionally, eligible students can access a wide range of finance and funding support to help them during their time at college. For personalised advice on funding, please contact our Learner Services Team on 01925 494 400 or email learner.services@wvr.ac.uk.

Why should I choose to study the course at Warrington & Vale Royal College?

Warrington & Vale Royal College offers a very high-quality education for higher level students. Higher education student feedback is strong, and students are highly complementary of their learning experience. Higher education students have access to specialist facilities and resources to support their programme of study as well as designated learning spaces to support independent study.

We have a team of dedicated, experienced staff who can share their extensive knowledge and skills with you. Learning in a friendly and inclusive environment, you will be fully supported to achieve your goals.

What are the entry requirements?



**Warrington
& Vale Royal
College**

Warrington Campus
Winwick Rd, Warrington WA2 8QA

 wvr.ac.uk

 01925 494 494

Winsford campus
Weaver St, Winsford CW7 4AH

 learner.services@wvr.ac.uk

You will typically have **one** of the following:

- A BTEC level 3 or other level 3 qualification in a related subject, minimum MPP or MM
- T Level with overall grade Pass
- A minimum of two A-Levels (A2) with one in a related subject at grade C or above
- Access to HE with relevant options

AND

- A* to C grade and/or 9 to 4 in GCSE English (language or literature)
- A* to C grade and/or 9 to 4 in GCSE Maths

Other requirements

Non-native English speakers who have not undertaken their final two years of schooling in English need to demonstrate capability in English at a standard equivalent to the levels identified below. This is necessary before being recruited to the programme, as the programme is both taught and assessed in English:

- Common European Framework of Reference (CEFR) level B2
- IELTS 5.5; reading and writing must be 5.5.

We welcome applications from mature students who have appropriate work experience in a related sector or role and/or have professional qualifications in a related industry.

All HNC/HND programmes require the completion of a personal statement prior to an admissions interview being offered. You will also be required to provide a reference from one of the following options:

- A previous course leader/teacher (if progressing from a recently attended further or higher education course)
- A recent or current employer
- An appropriate professional who can provide a character reference (if you have not been in recent education or employment).

What are my funding options?

Students applying to study on a Higher Education course can apply for a HE student loan at <http://www.gov.uk/student-finance>

For more information about financial support, please visit: <https://wvr.ac.uk/college-life/financial-support>

For personalised advice on funding, please contact our Learner Services Team on 01925 494 400 or email learner.services@wvr.ac.uk.

Are there any additional costs associated with the course?

The college provides all students with £3 print credit - any further printing will incur a cost.

Students should access to a personal computer and will need broadband access with a reliable connection.

Guidance on the latest version of relevant software will be provided by your course leader.

There may be an option to attend a range of national trips.



**Warrington
& Vale Royal
College**

Warrington Campus
Winwick Rd, Warrington WA2 8QA

 wvr.ac.uk

 01925 494 494

Winsford campus
Weaver St, Winsford CW7 4AH

 learner.services@wvr.ac.uk