

Mechanical Engineering HTQ Higher National Certificate

Course Overview

This one-year Higher National Certificate (HNC) in Mechanical Engineering provides the essential knowledge and practical skills required for a career in the mechanical and manufacturing engineering sectors. You will develop a strong foundation in mechanical principles, materials and thermodynamics, alongside core engineering skills such as design and mathematics. The course combines theory with practical application, preparing you for real-world engineering challenges. Throughout the course, you will apply your learning through practical activities and project-based work, developing problem-solving, teamwork and communication skills. This ensures you are well prepared for progression to higher-level study or employment within the engineering sector. On completion, you can progress to the HND (Level 5) or enter employment in sectors such as manufacturing, automotive, energy and production engineering.

What you will learn

You will begin by developing core engineering skills in design, mathematics and project management, which underpin your ability to analyse and solve engineering problems. You will then explore key mechanical topics including mechanical principles, fluid mechanics and thermodynamics, gaining an understanding of how mechanical systems operate in industry. You will also study production engineering and quality improvement, developing insight into manufacturing processes and efficiency. Practical and project-based learning will support your development of technical and professional skills, preparing you for further study or employment.

Entry Requirements

Standard entry to this course requires a recognised level 3 qualification in a relevant subject, such as a T Level, BTEC National or A Levels. Applicants with a higher-level qualification in an unrelated subject area may also be considered. You are expected to have GCSE English and Mathematics at grade 4 (C) or above, or an equivalent qualification. We welcome applications from individuals who may not meet the standard entry requirements but can demonstrate the ability to study at Level 4 and have relevant experience. All applicants could be invited to attend an interview to assess suitability and prior achievement.

Course Fees

For certain practical activities, you may be required to provide your own personal protective equipment (PPE).

Course Progression

This course provides a clear pathway into both further study and employment within the engineering sector. On successful completion of the Higher National Certificate (level 4), you can progress to the Higher National Diploma (Level 5) in your chosen engineering specialism, further developing your technical knowledge and skills. You may also choose to enter employment, with opportunities across industries such as manufacturing, energy, aerospace, automotive and automation. Typical roles include engineering technician, maintenance engineer or junior design engineer. The course is designed to equip you with the knowledge, practical skills and professional behaviours required to support your progression within the engineering industry.

What Happens Next

Apply online via the College website, and if you meet the entry criteria you will be invited for an interview/audition.

Course Details

Course Code	P00265
Start Date	13/09/2027
Study Hours	Full Time
Duration	1 year
Campus	Abbey Park Campus
Level	4

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