

Aeronautical Engineering HTQ Higher National Diploma

Course Overview

This two-year part-time Higher National Diploma (HND) in Aeronautical Engineering is designed for those looking to develop advanced knowledge and specialist skills in aerospace engineering while continuing in employment. Building on Level 4 study, the course focuses on aircraft systems, propulsion and advanced aerospace technologies, preparing you for higher-level roles within the industry or progression to a degree. Throughout the course, you will apply your learning through project-based work and industry-relevant activities, developing the skills required for progression into higher-level roles or further study within the aerospace sector. This flexible programme supports career development in the aerospace and aviation sectors.

What you will learn

In Year 1, you will study core advanced topics including professional engineering management, further mathematics, aircraft flight control systems and propulsion principles and technology. Learning is supported through practical activities and project work, allowing you to develop problem-solving, teamwork and communication skills. By the end of the course, you will be equipped to progress to higher-level study or enter employment in the engineering sector.

In Year 2, you will build on this knowledge by exploring aircraft structural integrity, Advanced Turbine Rotary Wing Aircraft Mechanical and flight Systems, avionics systems, gas turbine engine design and advanced aircraft mechanical and flight systems.

Entry Requirements

Standard entry to this course requires successful completion of a Level 4 qualification in a related subject area, such as a Higher National Certificate (HNC) in Engineering. You are expected to hold GCSE English and Mathematics at Grade 4 (C) or above, or an equivalent qualification. 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 supports progression into higher-level employment and further study within the engineering sector. On successful completion of the Higher National Diploma (Level 5), you may progress to a top-up degree (final year of a university programme) or other higher-level qualifications. Alternatively, you may choose to enter or progress within employment. The advanced knowledge and skills developed on this course are valued across a wide range of industries, including manufacturing, energy, aerospace, automotive and automation. Typical roles include design engineer, manufacturing engineer, project engineer or more senior technical positions within engineering organisations. The course is designed to prepare you for long-term career progression by developing both your technical expertise and professional skills.

What Happens Next

Step 1: Search for vacancies or apply through Leicester College Website using codes P00268 (FT) or P00729(PT). Step 2: Once submitted, your application will be reviewed by our Higher Education Team. Step 3: Any external students, If your application is shortlisted, you will receive a conditional offer. Alternatively, we may contact you by phone or email to discuss your application and request any additional information if required. Internal students go straight to Step 5. Step 4: Once you have met the conditions of your offer, typically in the summer prior to the course start date, you will be invited to attend the college. This will allow us to verify your certificates and complete the enrolment process. Step 5: After completing enrolment your Higher Education journey will officially begin with us.

Course Details

Course Code	P00729
Start Date	20/09/2027
Study Hours	Part Time
Duration	2 years
Campus	Abbey Park Campus
Level	5

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