

Aeronautical Engineering HTQ Higher National Diploma

Course Overview

This is a 2 year full time programme in which a Higher National Certificate (HNC) is completed in year one and Higher National Diploma (HND) in year two. With a career in engineering as your chosen route, this level 4/5 course offers a pathway in aeronautical engineering. The HNC/HND in engineering course is designed to enable students who may have come through either an academic or vocational route, to progress into higher education, building on the knowledge gained at level 3. From 2024/25 academic year, the HNC/D programmes in Mechanical, Aeronautical and Electrical/Electronic Engineering, will be updated to make them eligible for HTQ accreditation. Higher Technical Qualifications (HTQs) at level 4 and 5 are an alternative to apprenticeships or degrees. They may suit you if you want a more practical, employer-led study programme approved by the Institute for Apprenticeships and Technical Education. HTQs are technical qualifications that employers have helped to develop so that you can get the right training and skills you need to succeed at work. As well as studying the academic content of a standard HNC or HND programme the HTQ will also focus on the knowledge and skills required by industry.

What you will learn

In year one you will study for the HNC in engineering: all eight units at level 4 must be completed. Aeronautical engineering units include engineering design, engineering mathematics, engineering science, managing an engineering project (Pearson set project), aircraft aerodynamics, airframe mechanical systems, composite materials for aerospace applications, aircraft electrical power and distribution systems.

After successful completion of the HNC in year one, you will study a further eight units at level 5 for the HND in year two. Electrical/electronic units include research project (double unit), professional engineering management (Pearson-set), further mathematics, aircraft flight control systems, aircraft propulsion systems and technology, aircraft structural integrity, avionic systems.

Entry Requirements

Standard entry to this course requires a minimum of 32 UCAS points from a recognised level 3 qualification in a related subject (eg. T-Level, BTEC National, Access to Higher Education, or A-levels or equivalent) or a higher level qualification in an unrelated subject area with a significant mathematical content. You are expected to hold GCSE English and maths at grade 4 or equivalent. We welcome applicants who do not match standard entry requirements but who can demonstrate the ability to study this subject at university level and who can evidence relevant experience. An interview is required to ascertain prior achievement.

Course Progression

On successful completion of the first year of the course, you may continue to the level 5 HND in engineering. Once you have achieved the HND (after two years of study) you will be able to apply to study for a further year to obtain a full degree at university. This qualification is well regarded throughout the industry and the academic world. Career opportunities include managerial and technical positions in aeronautical engineering.

What Happens Next

Applications to this full-time undergraduate course should be made through UCAS at ucas.com using the course code C787, institution code L36. If you haven't started a UCAS application yet, and only want to apply to Leicester College, you can apply directly to us using our direct application form via the College Website and we will process a UCAS application on your behalf. Due to the nature of this programme, you may also be invited to attend an interview, or where necessary, other means of interview (i.e. telephone, web-based, Microsoft Teams) can be arranged.

Course Details

Course Code	P00268
Start Date	31/07/2026
Study Hours	Full Time
Duration	1 year
Campus	Abbey Park Campus
Level	5

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