

MEng

## Aerospace Engineering

**UCAS code** H421

Entry requirements	Study mode	Duration	Apply by: <b>14 January 2026</b>
A level: AAB	Full-time	4 years	Starts on: <b>28 September 2026</b>

### About this course

Study Aerospace Engineering and by the end of your time at Liverpool, you will be able to show that you can now design, build, test and fly an aircraft.

### Introduction

The Aerospace Engineering MEng is a four-year integrated Master's degree developed to fast-track our graduates to become Chartered Engineers either with the Institution of Mechanical Engineers or the Royal Aeronautical Society.

As an aerospace engineering student, you will experience a wide variety of topics and modes of study, whether it be conducting research, analysing reports or designing and building an aircraft.

By studying the MEng, you will develop a greater depth and breadth and specialist knowledge in core aerospace subjects than on the three-year BEng degree programme. At the end of the degree you will be able to demonstrate further key skills required by employers in advanced modules such as advanced aerodynamics; advanced aerostructures; flight handling qualities; advanced guidance systems and enterprise studies.

As part of year four, you will be able to demonstrate your knowledge and understanding in the year four Capstone Design Project, a year long assignment where you will be asked to find solutions to industry challenges or create your own invention.

This programme also has a year abroad option, an incredible opportunity to spend an academic year at one of our partner universities. On the four-year integrated master's programme, you can go abroad either between years two and three (apply in year two), or between years three and four (apply in year three).

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## What you'll learn

- Aircraft design and manufacturing
  - Flight testing
  - Systems engineering
  - How to conduct independent research
  - Aerodynamics
  - Flight dynamics and control
  - How to deal with complex problems that may require compromise to meet competing requirements
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## Accreditation

The MEng degree is recognised throughout the UK and fully satisfies the Engineering Council's academic requirements for registration as a Chartered Engineer. All of our Aerospace Engineering degree programmes are accredited, or pending accreditation, by our professional bodies, the Royal Aeronautical Society and the Institute of Mechanical Engineers and are a recognised qualification on the route to Chartered Engineer status.

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### Accreditation in detail

#### Institution of Mechanical Engineers

All mechanical engineering programmes are accredited, or pending accreditation, by the Institution of Mechanical Engineers. This is the

professional body for Mechanical Engineers. Our programmes are a recognised qualification on the route to Chartered Engineer status.

## **Royal Aeronautical Society**

The Royal Aeronautical Society is licensed by the Engineering Council to accredit academic programmes that provide the exemplifying level of understanding, knowledge and skills to underpin professional competence to help graduates on their way to registration as Chartered Engineers (CEng) or as Incorporated Engineers (IEng).

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# Course content

Discover what you'll learn, what you'll study, and how you'll be taught and assessed.

## Year one

You will be introduced to a range of fundamental topics that an aerospace engineer must at least be aware of to be able to function in such a multi-disciplinary industry.

## Modules

Compulsory modules	Credits
<u>INTRODUCTION TO AEROSPACE ENGINEERING (AERO110)</u>	7.5
<u>SOLIDS AND STRUCTURES 1 (ENGG110)</u>	15
<u>PROFESSIONAL ENGINEERING: A SKILLS TOOLKIT (ENGG111)</u>	30
<u>ENERGY SCIENCE (ENGG116)</u>	15
<u>ENGINEERING MATHEMATICS (ENGG198)</u>	22.5
<u>DIGITAL ENGINEERING (ENGG125)</u>	15
<u>INTRODUCTION TO ENGINEERING MATERIALS (MATS105)</u>	15

Programme details and modules listed are illustrative only and subject to change.

## Year two

You will continue to study the core engineering topics as well as taking part in a two-day flight test course in the national flying laboratory aircraft.

Students undertaking Aerospace Engineering programmes will be required to wear safety shoes or boots (both toe cap and midsole protection must conform to European safety legislation) for some activities, and these must be provided by the students themselves.

## Modules

Compulsory modules	Credits
<u>AEROENGINES (AERO213)</u>	15
<u>AEROSPACE ENGINEERING DESIGN 2 (AERO220)</u>	15
<u>DYNAMIC SYSTEMS (MECH215)</u>	15
<u>EXPERIMENTAL METHODS (ENGG201)</u>	7.5
<u>PROJECT MANAGEMENT (MNGT202)</u>	7.5
<u>SOLIDS &amp; STRUCTURES 2 (ENGG209)</u>	15
<u>ENGINEERING MATHEMATICS AND COMPUTING (ENGG295)</u>	15
<u>FLIGHT MECHANICS (AERO202)</u>	15
<u>ENGINEERING MATERIALS PROCESSING &amp; SELECTION (MATS201)</u>	15

Programme details and modules listed are illustrative only and subject to change.

## Year three

During your third year you will undertake an individual project. This provides you with the opportunity to conduct independent research and/or develop innovative

concepts in your preferred technical area of interest.

## Modules

Compulsory modules	Credits
<u>ADVANCED MODERN MANAGEMENT (MNGT352)</u>	7.5
<u>AEROSPACE ENGINEERING DESIGN 3 (AERO321)</u>	15
<u>AEROSTRUCTURES (AERO318)</u>	15
<u>FLIGHT DYNAMICS AND CONTROL (AERO317)</u>	15
<u>INDIVIDUAL PROJECT (ENGG341)</u>	30
<u>AERODYNAMICS (AERO316)</u>	15
<u>COMPUTATIONAL METHODS IN ENGINEERING (ENGG386)</u>	15
<u>SPACEFLIGHT (AERO319)</u>	7.5

Programme details and modules listed are illustrative only and subject to change.

## Year four

During this year you will work towards demonstrating your knowledge and understanding as part of the year four Capstone Design Project.

## Modules

Compulsory modules	Credits
<u>AEROELASTICITY (AERO415)</u>	7.5

<b>Compulsory modules</b>	<b>Credits</b>
<u>AEROSPACE CAPSTONE GROUP DESIGN PROJECT (AERO420)</u>	30
<u>ENTERPRISE STUDIES (MNGT414)</u>	7.5
<u>ADVANCED FLUID MECHANICS AND AERODYNAMICS (AERO406)</u>	15
<u>FLIGHT HANDLING QUALITIES (15CR) (AERO401)</u>	15
<u>AEROSTRUCTURAL ANALYSIS AND OPTIMISATION (AERO408)</u>	15
<b>Optional modules</b>	<b>Credits</b>
<u>ADVANCED 4TH YEAR RESEARCH PROJECT (ENGG443)</u>	15
<u>ADVANCED GUIDANCE SYSTEMS (AERO430)</u>	7.5
<u>ENERGY AND THE ENVIRONMENT (MECH433)</u>	15
<u>MUSCULOSKELETAL BIOMECHANICS (ENGG410)</u>	15
<u>NUCLEAR TECHNOLOGIES (MECH434)</u>	7.5
<u>SPACE MISSION DESIGN (AERO419)</u>	15
<u>ADDITIVE MANUFACTURING (MNFG603)</u>	15
<u>ADVANCED ENGINEERING MATERIALS (MATS631)</u>	15

Programme details and modules listed are illustrative only and subject to change.

## Teaching and assessment

## How you'll learn

We are leading the UK's involvement in the international Conceive-Design-Implement-Operate (CDIO) initiative – an innovative educational framework for producing the next generation of engineers.

Our degree programmes encompass the development of a holistic, systems approach to engineering. Technical knowledge and skills are complemented by a sound appreciation of the life-cycle processes involved in engineering and an awareness of the ethical, safety, environmental, economic, and social considerations involved in practicing as a professional engineer.

You will be taught through a combination of face-to-face teaching in group lectures, laboratory sessions, tutorials, and seminars. Our programmes include a substantial practical component, with an increasing emphasis on project work as you progress through to the final year. You will be supported throughout by an individual academic adviser.

## How you're assessed

Assessment takes many forms, each appropriate to the learning outcomes of the particular module studied. The main modes of assessment are coursework and examination. Depending on the modules taken, you may encounter project work, presentations (individual and/or group), and specific tests or tasks focused on solidifying learning outcomes.

## Liverpool Hallmarks

We have a distinctive approach to education, the Liverpool Curriculum Framework, which focuses on research-connected teaching, active learning, and authentic assessment to ensure our students graduate as digitally fluent and confident global citizens.

The Liverpool Curriculum framework sets out our distinctive approach to education. Our teaching staff support our students to develop academic knowledge, skills, and understanding alongside our **graduate attributes**:

- Digital fluency
- Confidence
- Global citizenship

Our curriculum is characterised by the three **Liverpool Hallmarks**:

- Research-connected teaching
- Active learning

- Authentic assessment

All this is underpinned by our core value of **inclusivity** and commitment to providing a curriculum that is accessible to all students.

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# Careers and employability

As a graduate of aerospace engineering, you will be equipped with the skills to work in the development and maintenance of aircraft, satellites, and space vehicles.

Typical types of work our graduates have gone on include:

- Airline operators
- Armed forces,
- Government research agencies like the Ministry of Defence (MoD)

Recent employers of our graduates are from the following industries and companies:

- Engineering and Infrastructure: ABB Ltd, Bentley, Metronet Rail, Rolls Royce;
- Utilities: United Utilities;
- Defence and Military: BAE Systems, British Army, RAF (Royal Air Force), Royal Navy;
- Aviation: British Airways;
- Government organisations: National Nuclear Laboratory (Government-owned).

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# Fees and funding

Your tuition fees, funding your studies, and other costs to consider.

## Tuition fees

### **UK fees (applies to Channel Islands, Isle of Man and Republic of Ireland)**

Full-time place, per year – £9,790

Year in industry fee – £1,905

Year abroad fee – £1,385 (applies to year in China)

## International fees

Full-time place, per year – £32,000

Year in industry fee – £1,905

Year abroad fee – £16,000 (applies to year in China)

The UK and international full-time fees shown are for the academic year 2026/27 (UK fees are subject to Parliamentary approval). UK year abroad and year in industry fees and international year in industry fees shown are for entry 2025, as 2026/27 fees have yet to be confirmed. Please be advised that tuition fees may increase each year for both UK and international students. For UK students, this will be subject to the government's regulated fee limits.

Tuition fees cover the cost of your teaching and assessment, operating facilities such as libraries, IT equipment, and access to academic and personal support. [Learn more about paying for your studies](#).

## Additional costs

We understand that budgeting for your time at university is important, and we want to make sure you understand any course-related costs that are not covered by your tuition fee. This may include a laptop, books or stationery. All safety equipment, other than boots, is provided free of charge by the department.

### **Stationery and equipment**

All essential safety equipment, other than boots, is provided free of charge by

the department.

[Find out more about additional study costs.](#)

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# Entry requirements

The qualifications and exam results you'll need to apply for this course.

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## A levels

AAB

including Mathematics and a second science.

Applicants with the Extended Project Qualification (EPQ) are eligible for a reduction in grade requirements. For this course, the offer is **ABB** with **A** in the EPQ.

You may automatically qualify for reduced entry requirements through our contextual offers scheme. Based on your personal circumstances, you may automatically qualify for up to a two-grade reduction in the entry requirements needed for this course. When you apply, we consider a range of factors – such as where you live – to assess if you're eligible for a grade reduction. You don't have to make an application for a grade reduction – we'll do all the work.

Find out more about [how we make reduced grade offers](#).

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## T levels

T levels are not currently accepted.

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## GCSE

4/C in English and 4/C in Mathematics

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## Subject requirements

Applicants following the modular Mathematics A Level must be studying A Level Physics or Further Mathematics as the second science (or must be studying at least one Mechanics module in their Mathematics A Level).

Accepted science subjects:

Applied ICT

Biology (and Human Biology)

Chemistry

Computer Science

Economics

Electronics

Environmental Science

Further Mathematics  
Geography  
Geology  
ICT  
Life and Health Sciences  
Mathematics  
Psychology  
Physics  
Statistics.

For applicants from England: For science A levels that include the separately graded practical endorsement, a "Pass" is required.

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### **BTEC Level 3 National Extended Certificate**

Acceptable at grade Distinction\* alongside BB in A Level Mathematics and a second science.

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### **BTEC Level 3 Diploma**

Distinction\* Distinction\* in relevant BTEC considered alongside A Level Mathematics grade B. Accepted BTECs include Aeronautical, Aerospace, Construction, Mechanical, Mechatronics and Engineering.

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### **BTEC Level 3 National Extended Diploma**

D\*DD in acceptable BTEC, plus B in A level Maths (not accepted without B in A level Maths)

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### **International Baccalaureate**

34 points overall and no score less than 4 and including 5 in HL Mathematics and 5 in HL Physics, or pass the IB Diploma with 6,6,5 in 3 Higher Level subjects, including 5 in HL Mathematics and 5 in HL Physics.

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### **Irish Leaving Certificate**

H1,H1,H2,H2,H2,H3, including H2 in Higher Maths and Higher Second Science. We also require a minimum of H6 in Higher English or O3 in Ordinary English

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### **Scottish Higher/Advanced Higher**

Pass Scottish Advanced Highers with grades AAB including Mathematics and a second science

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### **Welsh Baccalaureate Advanced**

B in the Welsh Baccalaureate, plus grades AA at A level to include Mathematics and a second science.

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### **Cambridge Pre-U Diploma**

D3 in Cambridge Pre U Principal Subject is accepted as equivalent to A-Level grade A M2 in Cambridge Pre U Principal Subject is accepted as equivalent to A-Level grade B Global Perspectives and Short Courses are not accepted.

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### **Access**

Pass Access to HE Diploma in a relevant subject with 45 Level 3 credits, with 36 at Distinction (including 15 Level 3 in Mathematics credits) and 9 at Merit.

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### **International qualifications**

[Select your country or region to view specific entry requirements.](#)

If you hold a bachelor's degree or equivalent, but don't meet our entry requirements, you could be eligible for a Pre-Master's course. This is offered on campus at the [University of Liverpool International College](#), in partnership with Kaplan International Pathways. It's a specialist preparation course for postgraduate study, and when you pass the Pre-Master's at the required level with good attendance, you're guaranteed entry to a University of Liverpool master's degree.

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## **English language requirements**

You'll need to demonstrate competence in the use of English language, unless you're from a [majority English speaking country](#).

We accept a variety of [international language tests](#) and [country-specific qualifications](#).

International applicants who do not meet the minimum required standard of English language can complete one of our [Pre-Sessional English courses](#) to achieve the required level.

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### **IELTS**

6.0 overall, with no component below 5.5

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### **TOEFL iBT**

78 overall, with minimum scores of listening 17, writing 17, reading 17 and speaking 19. TOEFL Home Edition not accepted.

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### **Duolingo English Test**

115 overall, with speaking, reading and writing not less than 105, and listening not below 100

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### **Pearson PTE Academic**

59 overall, with no component below 59

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### **LanguageCert Academic**

65 overall, with no skill below 60

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### **Cambridge IGCSE First Language English 0500**

Grade C overall, with a minimum of grade 2 in speaking and listening. Speaking and listening must be separately endorsed on the certificate.

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### **Cambridge IGCSE First Language English 0990**

Grade 4 overall, with Merit in speaking and listening

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### **Cambridge IGCSE Second Language English 0510/0511**

0510: Grade C overall, with a minimum of grade 2 in speaking. Speaking must be separately endorsed on the certificate. 0511: Grade C overall.

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### **Cambridge IGCSE Second Language English 0993/0991**

0993: Grade 5 overall, with a minimum of grade 2 in speaking. Speaking must be separately endorsed on the certificate. 0991: Grade 5 overall.

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### **Cambridge ESOL Level 2/3 Advanced**

169 overall, with no paper below 162

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### **International Baccalaureate English A: Literature or Language & Literature**

Grade 4 at Standard Level or grade 4 at Higher Level

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### **International Baccalaureate English B**

Grade 6 at Standard Level or grade 5 at Higher Level

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## **Pre-sessional English**

Do you need to complete a Pre-sessional English course to meet the English language requirements for this course?

The length of Pre-sessional English course you'll need to take depends on your current level of English language ability.

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### **Pre-sessional English in detail**

If you don't meet our English language requirements, we can use your most recent IELTS score, or [the equivalent score in selected other English language tests](#), to determine the length of Pre-sessional English course you require.

Use the table below to check the course length you're likely to require for your current English language ability and see whether the course is available on campus or online.

<b>Your most recent IELTS score</b>	<b>Pre-sessional English course length</b>	<b>On campus or online</b>
5.5 overall, with no component below 5.5	6 weeks	On campus

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Your most recent IELTS score	Pre-sessional English course length	On campus or online
5.5 overall, with no component below 5.0	10 weeks	On campus and online options available
5.0 overall, with no component below 5.0	12 weeks	On campus and online options available
5.0 overall, with no component below 4.5	20 weeks	On campus
4.5 overall, with no component below 4.5	30 weeks	On campus
4.0 overall, with no component below 4.0	40 weeks	On campus

If you've completed an alternative English language test to IELTS, we may be able to use this to assess your English language ability and determine the Pre-sessional English course length you require.

Please see our guide to [Pre-sessional English entry requirements](#) for IELTS 6.0 overall, with no component below 5.5, for further details.

## Alternative entry requirements

- If your qualification isn't listed here, or you're taking a combination of qualifications, [contact us](#) for advice
- [Applications from mature students](#) are welcome.

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