

BEng (Hons)

# **Engineering**

UCAS code H100

Entry requirementsStudy modeDurationA level: AABFull-time3 years

Apply by: **29 January 2025** Starts on: **22 September 2025** 

### **About this course**

Study Engineering and you will have the opportunity to delve into a huge range of disciplines. Become a problem solver, not just learning how to fix things but to develop and invent from the very start.

### Introduction

Following a broad first year of study covering all disciplines within the School, students on this programme will be required to transfer their registration onto one of the following engineering programmes, depending on whether they are on the three or four-year programme.

- Aerospace Engineering BEng (H425)
- Mechanical Engineering BEng (H300)
- Product Design Engineering BEng (HW24)

# What you'll learn

- Design, build and test products and systems
- Computer programming

- Engineering design
- Collaborative design
- How to conduct independent research
- How to deal with complex problems that may require compromise to meet competing requirements

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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

### **Modules**

| Compulsory modules                                   | Credits |
|--|---------|
| MECHANICAL PRODUCT DISSECTION (MECH109)              | 7.5     |
| SOLIDS AND STRUCTURES 1 (ENGG110)                    | 15      |
| ENERGY SCIENCE (ENGG116)                             | 15      |
| PROFESSIONAL ENGINEERING: A SKILLS TOOLKIT (ENGG111) | 30      |
| ENGINEERING MATHEMATICS (ENGG198)                    | 22.5    |
| INTRODUCTION TO ENGINEERING MATERIALS (MATS105)      | 15      |
| DIGITAL ENGINEERING (ENGG125)                        | 15      |

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

#### **Year two**

Year two follows your chosen path from:

- Aerospace Engineering BEng (H425)
- Mechanical Engineering BEng (H300)

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

#### **Year three**

Year three follows your chosen path from:

- Aerospace Engineering BEng (H425)
- Mechanical Engineering BEng (H300)

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 <u>Conceive-Design-Implement-Operate (CDIO)</u> 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

Graduates of this degree programme go on to a wide range of careers: you may be responsible for planning the electricity distribution network, or you may be designing the electronics of the next 'must have' item.

Some of our graduates go on to work in the industrial sector, in government and in education, whilst others enter non-technical professions such as banking, accountancy, management and law.

Specific career paths are many and varied, and have previously included:

- Design Engineer
- Systems Engineer
- Medical Physicist
- Postdoctoral Research Scientist
- Radio Frequency Scientist.

Many graduates have moved on to have careers with employers in the following industries:

- Technology: ARM Holdings Ltd, Ericsson Ltd, Logica CMG, Marconi, Siemens UK
- Energy: British Nuclear Group, Energetix Group PLC, Scottish Power, United Utilities
  PL
- Healthcare: Royal Liverpool University Hospital
- (Clinical Engineering)Government/Research: Daresbury Laboratory, Ministry of Defence, Science and Technology Facilities Council, The Highways Agency
- Engineering/Manufacturing: Deva Electronic Controls, Heap and Partners Ltd.

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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 - £9,535 Year abroad fee - £1,430 (applies to year in China)

#### International fees

Full-time place, per year - £29,100 Year abroad fee - £14,550 (applies to year in China)

The tuition fees shown are correct for 2025/26 entry. Please note that the year abroad fee also applies to the year in China.

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.

Find out more about the <u>additional study costs</u> that may apply to this course.

# **Entry requirements**

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

#### **A levels**

**AAB** 

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.

If you don't meet the entry requirements, you may be able to complete a foundation year which would allow you to progress to this course.

Available foundation years:

• Engineering Foundation (4 year route including a Foundation Year at Carmel College) BEng (Hons)

#### T levels

T levels are not currently accepted.

#### **GCSE**

4/C in English and 4/C in Mathematics

#### **Subject requirements**

Mathematics and a second science.

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 are Biology, Chemistry, Computing, Economics, Electronics, Environmental Science, Further Mathematics, Geography, Geology,

Human Biology, Physics and Statistics.

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

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

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

#### **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.

#### **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)

#### **International Baccalaureate**

35 overall including 5 in Higher Level Mathematics and 5 in Higher Level Physics.

#### **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

### Scottish Higher/Advanced Higher

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

#### Welsh Baccalaureate Advanced

Acceptable at grade B alongside AA in A Level Mathematics and a second science.

#### 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.

#### **Access**

Considered if taking a relevant subject. Check with Department or Admissions team.

#### 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 <u>University of Liverpool International College</u>, 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.

# **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 <u>international language tests</u> and <u>country-specific qualifications</u>.

International applicants who do not meet the minimum required standard of English language can complete one of our <u>Pre-Sessional English courses</u> to achieve the required level.

#### **IELTS**

6.0 overall, with no component below 5.5

#### **TOEFL iBT**

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

#### **TOEFL Paper**

Grade 6 at Standard Level or grade 5 at Higher Level

#### **Duolingo English Test**

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

#### **Pearson PTE Academic**

59 overall, with no component below 59

#### LanguageCert Academic

65 overall, with no skill below 60

#### 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.

#### Cambridge IGCSE First Language English 0990

Grade 4 overall, with Merit in speaking and listening

### 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.

### 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.

### Cambridge ESOL Level 2/3 Advanced

#### LanguageCert

Grade 4 at Standard Level or grade 4 at Higher Level

# **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.

### **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.

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

| Your most recent IELTS score             | Pre-sessional English course length | On campus or online |
|--|-------------------------------------|---------------------|
| 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 <u>Pre-sessional English entry requirements</u> 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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