



UNIVERSITY OF
LIVERPOOL

BEng (Hons)

Architectural Engineering

UCAS code HK26

Entry requirements	Study mode	Duration
A level: AAB	Full-time	3 years

Apply by: **29 January 2025**

Starts on: **22 September 2025**

About this course

Architectural Engineering is for students who wish to work at the intersection of architecture and structural engineering. Students develop a multidisciplinary skill set to design building structures and components of critical infrastructure. This includes learning about the technical, societal, historical, economic and environmental aspects needed to manage complex systems in the built environment.

Introduction

The Architectural Engineering degree is a multidisciplinary degree, encompassing civil engineering and architecture jointly delivered by the School of Engineering and the School of Architecture.

Architectural engineers are responsible for the design of different systems within a building or an aspect of critical infrastructure with a particular focus on key areas.

As a student, you will be provided with a multidisciplinary skill set to design building structures, bridges and critical infrastructure incorporating both the solid technical grounding that a typical civil/structural engineering degree provides; alongside a robust and wider appreciation of the architectural, societal, economic and environmental aspects associated to a particular design solution.

This programme also has a year abroad option, an incredible opportunity to spend an academic year at one of our partner universities.

What you'll learn

- Create innovative design strategies
 - Model and design heating, ventilation and air conditioning systems
 - Acoustic performance and lighting design
 - Hands-on construction experience
 - Design building structures, bridges and critical infrastructures
 - How to lead an individual research project
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Accreditation

This degree is accredited by the Joint Board of Moderators (JBM) comprising the Institution of Civil Engineers, Institution of Structural Engineers, Institute of Highway Engineers, the Chartered Institution of Highways and Transportation and the Permanent Way Institution on behalf of the Engineering Council for the purposes of fully meeting the academic requirement for registration as an Incorporated Engineer (IEng) and partially meeting the academic requirement for registration as a Chartered Engineer (CEng). Candidates must hold a masters or doctorate accredited as further learning for CEng to hold accredited qualifications for CEng registration.

See www.jbm.org.uk for further information and details of Further Learning programmes for CEng.

Accreditation in detail

JBM

These programmes are accredited by the Joint Board of Moderators, which represents five major civil engineering institutions and accredits civil engineering programmes on behalf of the Engineering Council, which sets and maintains the

standards for the engineering profession in the UK. The MEng degree is accredited as fully satisfying the educational base for a Chartered Engineer (CEng). The BEng degree is accredited as: (i) fully satisfying the educational base for an Incorporated Engineer (IEng) and (ii) partially satisfying the educational base for a Chartered Engineer (CEng). A programme of accredited further learning will be required to complete the educational base for CEng. See jbm.org.uk for further information and details of further learning programmes for CEng.

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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

In the first year, students are required to take **MATH198**.

Modules

Compulsory modules	Credits
<u>ENVIRONMENTAL DESIGN 1 (ARCH111)</u>	15
<u>GEOMECHANICS 1 (CIVE120)</u>	7.5
<u>INTRODUCTION TO STRUCTURAL MATERIALS (ENGG108)</u>	7.5
<u>SOLIDS AND STRUCTURES 1 (ENGG110)</u>	15
<u>CIVIL AND ARCHITECTURAL ENGINEERING PROJECTS (CIVE162)</u>	30
<u>ENGINEERING MATHEMATICS (ENGG198)</u>	22.5
<u>INTRODUCTION TO ENGINEERING MATERIALS (MATS105)</u>	15

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

Year two

During year two, you will have a week of real, hands-on construction experience at 'The Constructionarium'. The Constructionarium takes place at a six-hectare site, specifically designed and built to provide a range of challenging teaching and learning conditions for students.

Modules

Compulsory modules	Credits
<u>ENVIRONMENTAL DESIGN 2 (ARCH211)</u>	15
<u>GEOMECHANICS 2 (CIVE220)</u>	15
<u>GROUP DESIGN PROJECT (CIVE263)</u>	15
<u>PROGRAMMING FOR CIVIL ENGINEERS (CIVE286)</u>	7.5
<u>STRUCTURAL ELEMENT DESIGN (CIVE241)</u>	15
<u>ENVIRONMENTAL PLANNING AND INFRASTRUCTURE PROJECT (CIVE261)</u>	15
<u>EXPERIMENTAL METHODS (ENGG201)</u>	7.5
<u>ENGINEERING MATHEMATICS II (CIVE299)</u>	7.5
<u>STRUCTURAL BEHAVIOUR (CIVE203)</u>	15
<u>DIGITAL MODELLING (CIVE287)</u>	7.5

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

Year three

The programme gives you the opportunity to undertake an individual research project in year three. Teaching staff offer projects based on their research expertise.

Modules

Compulsory modules	Credits
<u>SUSTAINABLE DESIGN AND CONSTRUCTION MANAGEMENT (CIVE350)</u>	15
<u>CONTEXT 3.1: HISTORY AND THEORY OF ARCHITECTURE (ARCH321)</u>	15
<u>ENVIRONMENTAL DESIGN 3 (ARCH311)</u>	15
<u>GEOTECHNICAL ENGINEERING (CIVE320)</u>	15
<u>INDIVIDUAL PROJECT (ENGG341)</u>	30
<u>OLD STRUCTURES OF STEEL, TIMBER AND MASONRY (CIVE334)</u>	15
<u>STRUCTURES 3 (CIVE344)</u>	7.5
<u>EARTHQUAKE ENGINEERING (CIVE342)</u>	7.5

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

Our research-led teaching ensures that we incorporate the latest advances in cutting-edge engineering research. As well as achieving a degree qualification, you will graduate as an industry-ready engineer who has both practical experience and highly desirable skills to the engineering industry.

Studying this course will expose you to maximum opportunities for career prospects, graduate opportunities, and student summer placements specifically during the annual engineering careers fair with 30 blue chip companies attending (including Jaguar Land Rover, Nestle, Toyota, JCB, British Army, United Utilities, ABB Ltd, Network Rail, BAE Systems and many more).

Typical routes/roles available to graduates:

- Work experience opportunities – placements during the summer or for a full academic year in leading engineering companies.
- Postgraduate opportunities – MSc or PhD level

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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 includes a lab coat, safety boots, and a residential construction course.

Students should expect to cover the following costs:

Lab coats

Students are required to wear a lab coat for all Engineering laboratory sessions.

Students may purchase a lab coat at the start of the year from the Student Support Office at a subsidised cost of £15.

Safety boots

Students will be required to wear safety shoes or boots (with both toe cap and

midsole protection conforming to European safety legislation) for some activities. Boots must be provided by the students.

Other safety equipment.

All essential safety equipment, other than those listed above, is provided free of charge by the department.

The 'Constructionarium'

During year two, you will have a week of real, hands-on construction experience at 'The Constructionarium'. There is an additional cost of up to £250 for the Constructionarium.

[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.

A levels

AAB including Mathematics.

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

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 at A level including A Level Mathematics.

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 at Higher Level Mathematics

Irish Leaving Certificate

H1,H1,H2,H2,H2,H3, including H2 in Higher Maths. 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

Welsh Baccalaureate Advanced

Acceptable at grade B alongside AA in A Levels including A Level Mathematics.

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 [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.

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.

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

169 overall, with no paper below 162

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
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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