

BEng (Hons)

# Civil Engineering with Year in Industry

UCAS code H203

Entry requirementsStudy modeDurationA level: AABFull-time4 years

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

### **About this course**

Civil engineers are responsible for the design, project management and construction of the physical infrastructure of our society. Our broadbased, vocational programme covers all the required aspects of a civil engineer's education, with an emphasis on applying your learning in context.

## Introduction

You will be introduced to the essentials – everything from structural analysis and design, materials, ground engineering, water supply and sanitation, to the digital built environment and its digitisation. You'll also study relevant subjects such as maths, computer-aided drawing, and communication skills. You will be given an understanding of the climate crisis and the biodiversity crisis and learn how civil engineers can play their part in addressing these global challenges.

A range of individual and group design exercises provide an opportunity for industrial feedback and this is supplemented by site visits. Our teaching staff offer projects based on their research expertise.

Students are encouraged and supported to gain relevant work experience to enhance their employability by applying for a summer internship or a year placement with an approved company/organisation.

Civil engineering graduates are in great demand and our programme aims to provide the educational base for graduates who demonstrate great skills in critical thinking, collaboration, communication and creativity.

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

- The key aspects underpinning the field of Civil Engineering
- · Leading and working in teams
- How to undertake research
- Adapting to a busy hands-on industry environment
- Critical thinking
- Teamwork
- How to present and communicate clearly

### **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 <u>www.jbm.org.uk</u> 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.

### **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
GEOMECHANICS 1 (CIVE120)	7.5
SOLIDS AND STRUCTURES 1 (ENGG110)	15
ENERGY SCIENCE (ENGG116)	15
CIVIL AND ARCHITECTURAL ENGINEERING PROJECTS (CIVE162)	30
ENGINEERING MATHEMATICS (ENGG198)	22.5
DIGITAL ENGINEERING (CIVE125)	15
INTRODUCTION TO ENGINEERING MATERIALS (MATS105)	15

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

#### **Year two**

Students taking the BEng programme, who have reached the required academic standard in their studies, are eligible to transfer to the MEng programme at the end of year two.

### **Modules**

Compulsory modules	Credits
GEOMECHANICS 2 (CIVE220)	15
GROUP DESIGN PROJECT (CIVE263)	15
HYDRAULICS (CIVE210)	15
STRUCTURAL ELEMENT DESIGN (CIVE241)	15
ENVIRONMENTAL PLANNING AND INFRASTRUCTURE PROJECT (CIVE261)	15
PROGRAMMING FOR CIVIL ENGINEERS (CIVE286)	7.5
ENGINEERING MATHEMATICS II (CIVE299)	7.5
STRUCTURAL BEHAVIOUR (CIVE203)	15
TRANSPORTATION ENGINEERING AND MODELLING (CIVE212)	7.5
ENVIRONMENTAL ENGINEERING 1 (CIVE204)	7.5

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

#### **Year three**

During this year you will undertake a year placement with an approved company/organisation. The aim is to develop an understanding of the practical application of theories and technical skills in a real-work environment. Industry-relevant activities will develop your transferrable skills and professional competence, leading to enhanced employability.

Whilst we will provide all necessary support and guidance, it is the responsibility of the student to secure an industrial placement. Applicants should note that these are highly sought after, and competition to be accepted into one can be significant. They

therefore cannot be guaranteed. Students who fail to secure a suitable placement will transfer back to the standard version of the programme without a year in industry.

### **Modules**

Compulsory modules	Credits
SCHOOL OF ENGINEERING YEAR IN INDUSTRY (ENGG299)	120

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

### **Year four**

### **Modules**

Compulsory modules	Credits
GEOTECHNICAL ENGINEERING (CIVE320)	15
INDIVIDUAL PROJECT (ENGG341)	30
SUSTAINABLE WATER ENGINEERING (CIVE316)	15
OLD STRUCTURES OF STEEL, TIMBER AND MASONRY (CIVE334)	15
SUSTAINABLE DESIGN AND CONSTRUCTION MANAGEMENT (CIVE350)	15
STRUCTURAL PLANNING (CIVE340)	15

Optional modules	Credits
INTRODUCTION TO FINITE ELEMENTS (ENGG302)	7.5

Optional modules	Credits
UNCERTAINTY, RELIABILITY AND RISK 1 (ENGG304)	7.5
STRUCTURAL DYNAMICS (ENGG301)	7.5
EARTHQUAKE ENGINEERING (CIVE342)	7.5

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

### **Teaching and assessment**

# How you'll learn

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.

# Careers and employability

We are committed to developing the modern professional engineers for the future, ensuring that learning environments reflect future working environments. The skills gained through studying a degree in Civil Engineering equip our graduates with the knowledge necessary to excel in an ever-changing industry.

Many graduates have moved on to have careers with employers such as:

- Airbus
- BMI
- British Airways
- Highways Agency
- Jaguar Land Rover
- National Nuclear Laboratory
- Network Rail
- Pilkington
- Rolls Royce
- Siemens

# Fees and funding

Your tuition fees, how to pay, 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 in industry fee - £1,905

#### International fees

Full-time place, per year - £29,100 Year in industry fee - £1,905

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, assessment, operating University facilities such as libraries, IT equipment, and access to academic and personal support.

### **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 residential, 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.

# **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.

Many countries have a different education system to that of the UK, meaning your qualifications may not meet our direct entry requirements. Although there is no direct Foundation Certificate route to this course, completing a Foundation Certificate, such as that offered by the University of Liverpool International College, can guarantee you a place on a number of similar courses which may interest you.

# **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-</u> specific qualifications.

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

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 <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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