Course Summary: November 12, 2026

Civil Engineering BEng Honours

Study mode and duration

Full time: 3 years

UCAS code

H200

UCAS institution name and code

NEWC / N21

Next start date

September 2027

Tuition fees (Year 1)

FT Home: **£10,050**

FT International: **£30,700** Scholarships available

Typical entry requirements

A-Level: ABB

IB: 32 points

Course delivery

On Campus

Work placement opportunity Study abroad option Professional accreditation and recognition

Course overview

Our accredited BEng Honours degree equips you with the expertise, real-world experience, and confidence to tackle complex engineering challenges and help build a more sustainable future.

Start shaping a better world with this degree built around sustainability, innovation, and real-world impact. You'll be equipped with the skills and knowledge to shape cities, design major structures, or solve global engineering challenges.

Our practical, design led approach is powered by specialist laboratories, industry standard digital tools, and exceptional links with leading engineering organisations. Throughout your studies, you'll build a solid foundation across core civil engineering disciplines, including:

- environmental systems
- structures
- geotechnics
- transport
- water engineering
- spatial data engineering

As the course progresses, you'll explore advanced topics such as hydrosystems and decarbonised, resilient infrastructure. You'll also gain invaluable insight through site visits, placements, and real-world design projects. You'll graduate as a specialist engineer, with the ability to lead in the future of sustainable engineering.

BEng or MEng?

Both our BEng degree and specialist MEng degrees provide a pathway to becoming a Chartered Engineer. This is one of the most recognisable international engineering qualifications.

Our MEng degrees are a direct route to becoming a Chartered Engineer (CEng). You don't need to study any more qualifications after your degree to work towards chartered status.

Our three-year BEng degree can also lead to Chartered Engineer status. However, you'll need to complete further study, such as an approved master's degree.

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Additional information

This degree allows you to explore several engineering disciplines in year one. This flexible route is taught across Civil, Electrical & Electronic and Mechanical Engineering.

You'll gain an understanding of engineering in a multidisciplinary context. You'll develop diverse skills relevant to the needs of industry and today's global challenges.

After successfully completing Stage 1, you'll have the option of transferring on to one of the accredited Civil, Electrical & Electronic or Mechanical Engineering degrees. This is subject to the degree programme regulations and capacity of the degree you are transferring to.

Quality and ranking

Professional accreditation and recognition

Professional accreditation review and recognition of professional qualifications in Europe

Professional accreditations are reviewed regularly by professional bodies to ensure they meet the latest industry practices and regulatory standards. This keeps your degree rigorous, relevant, and highly valued by employers, providing a clear pathway into your chosen career.

If you are studying an accredited degree and considering a career in Europe after graduation, it is important to stay informed about international standards. The best resource for current information is the UK Government's guidance on recognition of UK professional qualifications in EU member states.

This official resource provides essential details on:

- whether your profession is **regulated** in another country.
- the specific **steps you need to take** to practice abroad.
- which **organisations** you should contact to begin the process.

Our students

Ethan from United Kingdom

Civil Engineering MEng

I've done summer placements where I gained hands-on experience in engineering surveying and participated in community outreach for social value.

What you'll learn

Modules

The information below is intended to provide an example of what you will study.

Most degrees are divided into stages. Each stage lasts for one academic year, and you'll complete modules totalling 120 credits by the end of each stage.

Full details of the modules on offer will be published through the Programme Regulations and Specifications ahead of each academic year. This usually happens in May.

Our teaching is informed by research. Course content may change periodically to reflect developments in the discipline, the requirements of external bodies and partners, and student feedback.

Stage 1 will provide a broad introduction to the principles of engineering. You will gain an understanding of design processes in a multi-disciplinary context. This will aid the development of your professional skills. You will also focus on Properties and Behaviours of Engineering, Materials, Mechanics, and Electrical and Magnetic Systems.

Modules

Compulsory Modules	Credits
Engineering Mathematics I	20
Electrical and Magnetic Systems	15
Electronics and Sensors	10
Thermofluid Mechanics	15
Properties & Behaviour of Engineering Materials	15
Mechanics I	15
Introduction to Programming Languages (C, Matlab and Python)	15

Sustainable Design, Creativity and Professionalism	15

In Stage 2, you'll delve further into key topics, with modules such as Design of Sustainable Engineering Systems, Construction Management, Land Traffic and Highways, and Hydraulics.

Modules

Compulsory Modules	Credits
Statistics and Numerical Methods for Civil Engineers	10
Design of Sustainable Engineering Systems 2	20
Construction Management	10
Water Treatment Engineering for the 21st Century	10
Environmental Systems and Quantification	10
Geotechnics	10
Design of Building Elements	10
Land Traffic and Highways	10
Hydraulics	10
Engineering Surveying	10
Engineering Mechanics: Statics	10

Stage 3 will involve an in-depth project, allowing you to carry out a substantial, individual piece of work addressing current and future issues in civil engineering.

Alongside this project, you'll also complete modules covering areas such as Hydrosystems Engineering, Engineering Ethics and Sustainability, Foundation Design, and Design of Building Systems.

Modules

Compulsory Modules	Credits
Design of Sustainable Engineering Systems 3	20
Engineering Ethics and Sustainability	10
The Data-Centric Urban Environment	10
Individual Project	20
Foundation Design	10
Exploring the Ground: Investigating and improving our terrestrial environment	10
Design of Building Systems	10
Decarbonised, Adaptable and Resilient Transport Infrastructures	10
Hydrosystems Engineering	10
Spatial Data Engineering and BIM	10

How you'll learn

Teaching methods

You'll learn through:

- lectures
- practical work
- site visits
- individual study
- group work
- tutorials
- lab work

Assessment methods

You'll be assessed through a combination of:

- Assessments
- Assignments – written or fieldwork
- Case studies
- Coursework
- Group work
- Practical sessions
- Presentations
- Projects
- Seminar tasks/exercises

Skills and experience

Practical skills

You'll learn from world class researchers at the forefront of sustainable engineering. You'll also gain valuable insight through site visits, placements, and industry collaboration.

Throughout your studies, you'll carry out practical work in our specialist labs. This will include testing your designs, learning how different materials behave and conducting experimental work. You'll have access to our multi-disciplinary environmental lab and an off-campus field facility. This includes flood defence schemes, electric vehicles, and an engineering embankment.

Business skills

You'll engage in design-focused modules that sharpen your professional skills and refine your critical thinking. You'll complete reflective logs that mirror those used in industry.

Immersive site visits will give you first-hand insight into real-world engineering, allowing you to observe and learn from experienced professionals in action.

Research skills

During your studies you'll be taught by world-class researchers, with cutting-edge research at the forefront of your learning. Our academic staff are experts in their field, with a diverse range of research strengths. See our research section for more information on our world-leading research.

You'll also undertake independent projects based around the latest industry developments, conducting your own research.

Support

To support you in your studies, all new students entering year 1 or year 2 will receive a start-up pack containing essential personal protective equipment.

You'll receive comprehensive support from the moment you arrive at the University. You'll be supported by an academic adviser. You'll also benefit from the School's student buddies scheme.

Opportunities

Study abroad

Experience life in another country by choosing to study abroad as part of your degree. You'll be encouraged to embrace fun and challenging experiences, make connections with new communities and graduate as a globally aware professional, ready for your future.

You can choose to spend up to a year studying at a partner institution overseas.

If you choose to study abroad, it will extend your degree by a year.

Find out more about study abroad

Work placement

This civil engineering degree is also available with a year's work placement, as a four-year programme.

You'll apply to spend 9 to 12 months working in any organisation in the world, and receive University support from our dedicated team to secure your dream placement. Work placements take place in Stage 3.

You'll gain first-hand experience of working in the sector, putting your learning into practice and developing your professional expertise.

Placements are subject to availability.

Find out more about work placements

Watch our access to engineering careers fair video.

Additional information

Advice on maths and science requirements

If you don't think you will have the exact mathematics and science qualifications referred to in our entry requirements by the time you need them, you may not be sure what to do.

- If you have a maths qualification but will not have it at A Level (or equivalent) when you start your degree, you should apply for the relevant degree with Foundation Year. We may give you the opportunity to take the Newcastle University Pre-Entry Maths Course* and the option to start in Year 1 if we think that this will be the best route for you.
- If you have A Level Maths (or equivalent) already but not at the required grade, you should contact us for advice. We may decide that you could be considered for Foundation Year entry, or it may be that this course is not the best option for you.
- If you will not have the equivalent of an A Level in the science subject (if any) required, you should apply for the relevant degree with Foundation Year.

If you are still not sure, don't worry. Whatever you apply for, our Admissions Tutors will help you decide which is the best route for you. They may, therefore,

make you an offer for a different course from the one you apply for (eg Foundation Year entry instead of Year 1 entry).

*The Newcastle University Pre-Entry Maths Course aims to provide the requisite mathematical skills and concepts needed on our engineering, maths and physics degree courses and to prepare students for the modes of learning they will encounter. The materials for the course are delivered electronically and include opportunities to practise your skills. You study the materials in your own time and, when you are ready, you book your exam with the Engineering School to which you have applied. A fee of £150 is payable at the time of booking the exam or shortly before the date set for examination.

Your future

When you graduate from this programme, you'll be highly employable with a diverse and transferable skill set. You'll have the specialised expertise needed to excel as a civil or structural engineer.

Our recent graduates have gone on to work in roles such as:

- graduate civil engineer
- graduate structural engineer

- consultant to architect
- design-build contractor

They've taken on these roles with companies such as:

- AECOM
- Arcadis
- Arup
- AtkinsRéalis
- Balfour Beatty
- Jacobs
- Sirius Group
- Taylor Woodrow
- Transport for London

Graduates have pursued careers various industries, including mining, nuclear, oil and gas, and renewable energy.

Industry links

We have strong links with regional partners and industry leaders, including:

- AECOM
- Arup
- Bowmer and Kirkland
- Cundall
- Mott MacDonald
- Royal HaskoningDHV
- Stantec
- WSP

Through these links, you'll have access to guest lectures, site visits, and networking and placement opportunities. The department also hosts the regional North East office of the Institution of Civil Engineers, providing opportunities to meet and engage with professionals.

Discover our Learning Partnerships Events for access to student networking.

Careers support

Our Careers Service is one of the largest and best in the country, and we have strong links with employers. We provide an extensive range of opportunities to all students through our ncl+ initiative.

Visit our Careers Service website

Facilities

Civil Engineering is taught at our city-centre campus in the Cassie Building, part of the integrated School of Engineering.

You'll have access to world-class facilities and living labs used across disciplines, including:

- Heavy Structures Lab
- Geotechnical and Materials Labs
- Novak Hydraulic Lab
- Makerspace for prototyping and innovation

- High-performance computing systems
- Analytical and bio-labs
- National Green Infrastructure Facility
- BE:WISE – Europe's largest wastewater treatment research facility
- Urban Observatory – monitoring 50+ types of city-wide data
- Millennium Laboratory
- Merz Court Pilot Plant
- Electronics Teaching Lab
- Clean-Room Microfabrication Lab

These facilities support practical learning, research, and real-world project experience.

Find out more...

- Go online for information about our full range of degrees: **www.ncl.ac.uk/undergraduate**
- Watch videos about student life in Newcastle by visiting our YouTube channel at **www.youtube.com/@newcastleuni**
- Watch a virtual tour of our campus at **https://youtu.be/vJUfHcqB7l8?si=8IUrf7kTxXbgdfr1**
- Book for an Open Day to come and see us in person **www.ncl.ac.uk/openday**
- Contact us online at **www.ncl.ac.uk/enquiries** or phone +44 (0)191 208 3333

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