

Course Summary: March 30, 2026

Civil and Structural Engineering BEng Honours

- UCAS code: **H210**
- Full time
- 3 years

This professionally accredited, three-year degree will equip you with the specialist skills and knowledge you need for a career in structural engineering.

You are currently viewing course information for entry year: **2026**

Next start date:

- September 2026

Tuition fees (Year 1)

- Home: **£9,790**
- International: **£30,700**

Entry requirements and offers

- A-Level: **ABB**
- IB: **32 points**

UCAS Institution name and code:

- NEWC / N21

Undergraduate Open Day

Start your university journey. Find where you belong. Friday, June 26 (9:00-16:00)
Saturday, June 27 (9:00-16:00)

[Book your place now](#)

Course overview

This course will allow you to develop broad-ranging engineering knowledge. You'll gain the specific skills you need to turn designs for buildings and bridges into reality, or design innovative and sustainable solutions to global challenges.

During this degree you'll have the opportunity to take part in site visits and placements, providing a practical focus. You'll also carry out hands-on work in our specialist labs and facilities. You'll benefit from strong industry connections and insights from world-class researchers.

You'll focus on the design of structures with topics such as an introduction to architecture, sustainable engineering systems, and construction management. You will emerge as a well-rounded engineer with an in-depth understanding of the key civil engineering disciplines.

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.

Your course and study experience - disclaimers and terms and conditions

Please rest assured we make all reasonable efforts to provide you with the programmes, services and facilities described. However, it may be necessary to make changes due to significant disruption, for example in response to Covid-19.

View our [Academic experience page](#), which gives information about your Newcastle University study experience for the academic year 2025-26.

See our [terms and conditions and student complaints information](#), which gives details of circumstances that may lead to changes to programmes, modules or University services.

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

All professional accreditations are reviewed regularly by their professional body.

Modules and learning

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.

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.

Optional module availability

Student demand for optional modules may affect availability.

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.

To find out more please [see our terms and conditions](#)

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 develop your professional skills.

You will also focus on engineering materials, mechanics , and electrical and electronic engineering.

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, Structural Analysis, 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

In Stage 3, the programme will start to integrate specialist areas of structural engineering, with modules such as Introduction to Architecture, Design of Building Systems, and Structural Analysis.

You'll also complete an in-depth individual project, allowing you to carry out a substantial piece of research, addressing current and future issues in civil and structural engineering.

Modules

Compulsory Modules	Credits
Introduction to Architecture	10
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
Structural Mechanics	10
Spatial Data Engineering and BIM	10

Teaching and assessment

Teaching methods

You'll learn through:

- lectures
- practical work
- site visits
- individual study
- group 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 carry out practical work in our specialist labs, including testing your design decisions, learning how different materials behave, and carrying out experimental work in the structures labs.

You'll also have access to our new multidisciplinary environmental lab, as well as full-scale field facilities off campus, including flood defence schemes, electric vehicles, and an engineering embankment.

Business skills

You'll study design-focused modules, where you will develop your professional skills, carry out critical reviews, and reflective logs that mirror those used in industry.

You'll also take part in a number of site visits, where you'll observe professional engineers at work.

Research skills

You'll be taught by world-class researchers and cutting-edge research will be at the forefront of your learning. You'll undertake independent projects based around the latest industry developments, conducting your own research.

Opportunities

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](#)

Facilities and environment

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.

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 personal tutors, stage tutors, and degree tutors. You'll also benefit from the School's student buddies scheme.

Your future

When you graduate from this programme, you'll be highly employable with a diverse and transferable skill set, alongside the very specialist skills needed to succeed 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 roles with companies such as:

- AtkinsRéalis
- Arup
- AECOM
- Jacobs
- Transport for London
- Balfour Beatty

Graduates have taken on work in a range of industries, within mining, nuclear, oil and gas, and renewable energy.

Industry links

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

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

Through these links, you'll have access to guest lectures and site visits, as well as networking and placement opportunities.

The North East regional office of the Institute of Civil Engineering is based within the School, so you'll have plenty of opportunities to get involved.

Make a difference

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](#)

Recognition of professional qualifications outside of the UK

If you're studying an **accredited degree** and thinking about working in Europe after you graduate, the best place to find current information is the [UK Government's guidance on recognition of UK professional qualifications in EU member states](#). This official resource explains whether your profession is regulated in another country, what steps you need to take, and which organisation you should contact.

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=8lUrf7kTxXbgdfr1>
- 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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<https://www.ncl.ac.uk/student-welcome/student-contract/>

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