



University of
Nottingham

UK | CHINA | MALAYSIA

Civil Engineering



Shape it



Build it



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Expert academics

who are pushing forward the boundaries of the subject



Our course is shaped by our industrial links with companies such as

AECOM, Taylor Woodrow and Sir Robert McAlpine

Get hands-on experience

with a year out in industry



Develop the skills and knowledge needed to become a **Chartered Engineer**



“My QUEST scholarship was a great opportunity that not only allowed me to undertake summer placements with Network Rail, but gave me great experience in civil engineering.”

Serena Gough,
MEng Civil Engineering



All our courses are accredited by relevant industrial bodies



Top 10 in UK
for civil engineering

The Guardian University Guide, 2019.



Guidance and advice

from your personal tutor, peer mentor and dissertation supervisor

 **95.2%**

of undergraduates from the Department of Civil Engineering secured work or further study within six months of graduation*

*See page 12

Studying civil engineering at Nottingham

A degree in civil engineering from Nottingham demonstrates that you can think critically, solve complex problems and work effectively. Our strong ties with industry mean our students enjoy work experience and career progression throughout the course and beyond.

Facilities

We have dedicated teaching labs for structures, geotechnics and fluid mechanics. We also have a large geotechnical centrifuge facility, leading-edge GPS, surveying and laser scanning equipment, the largest road materials testing facility in a UK university and a strong floor facility for major structural testing.

Accreditation

Accreditation is a mark of assurance that the degree meets the standards set by the Engineering Council in the UK Standard for Professional Engineering Competence (UKSPEC). An accredited degree will provide you with some or all of the underpinning knowledge, understanding and skills for eventual registration as a Chartered Engineer (CEng). Most employers recruit preferentially from accredited degrees.

At a glance

- Achieve a qualification in a department with extremely high graduate employment rates
- Gain hands-on experience through a variety of summer and year-out placement opportunities, which are enhanced by our strong links with industry
- Take advantage of our purpose-built laboratories and design studios

Our degrees are currently accredited by the Joint Board of Moderators (JBM) under licence from the UK regulator, the Engineering Council incorporating:

- The Institution of Civil Engineers
- The Institution of Structural Engineers
- The Chartered Institution of Highways and Transportation
- The Institute of Highway Incorporated Engineers

We are the only department in the UK whose civil engineering degree (MEng) is also accredited by the Royal Institution of Chartered Surveyors, if students choose appropriate elective modules.

Engineering Adviser Scheme

We work with a network of local practising engineering advisers throughout our undergraduate degree programmes who arrange site visits and provide helpful advice. This gives you a professional perspective on much of your project work, which is a central theme of our courses.

Our courses

Degree title	UCAS code	Duration	A levels	IB
Single honours				
BEng Civil Engineering	H201	3 years	AAB	36-34
BEng Civil Engineering including an Industrial Year	H20A	4 years	AAB	36-34
MEng Civil Engineering	H200	4 years	AAA	36
MEng Civil Engineering including an Industrial Year	H20B	5 years	AAA	36

Required subjects

All courses: You must have Maths A level or 6 at Higher Level (IB). We also ask for an A level or 6 at Higher Level in physics, chemistry, biology, design and technology, geography, geology, computing or further maths.

A pass is required in science practical tests, if assessed separately.

General studies, critical thinking, citizenship studies, global perspectives and research, thinking skills are not accepted.

An A level in quantitative methods is not acceptable in lieu of maths requirements.

Foundation courses

Applicants who are not eligible for direct entry to undergraduate study may be able to apply for the Engineering Foundation Year Programme. Find out more at nottingham.ac.uk/foundationcourses

English language requirements

IELTS 6.0 (no less than 5.5 in any element). For details of other English language tests and qualifications we accept, please see nottingham.ac.uk/go/alternativerequirements

Academic English preparation

If you require additional support to take your language skills to the required level, you may be able to attend a preessional course at the Centre for English Language Education, which is accredited by the British Council for the teaching of English in the UK.

Students who successfully complete the preessional course to the required level can progress onto their chosen degree course without retaking IELTS or equivalent. Find out more at nottingham.ac.uk/cele

BEng | MEng Civil Engineering

Our courses will help you meet the educational requirements needed on your journey to becoming a chartered civil, structural or highway engineer.

Applicants to the MEng courses will usually be made a dual offer of AAA for MEng and AAB for BEng. This means you'll receive two offers for one UCAS application and a place in the department even if you narrowly miss the AAA requirement. Students performing well on the BEng course have the option to transfer to the MEng course.

The BEng degree is a three-year programme and students following this route will need to undertake further study if they wish to become chartered engineers. Many students, especially those from overseas, choose to do our BEng and then stay to complete one of our accredited MSc degrees.

Our civil engineering courses provide a solid grounding in the core disciplines of structures, hydraulics, geotechnics, materials, surveying and construction management. There is an emphasis on project work throughout and a wide range of module choices to develop your specialist skills in later years.

Year one

In your first year you will be introduced to the core disciplines and the context of civil engineering and engineering design project work. Professional skills are explored in workshops. There is also a residential surveying field course.

Year two

Your core subjects will be developed in greater depth alongside further workshops and a structural design project to help you see the application of your studies.

Year three

Core subjects continue alongside a range of optional modules including individual investigative project and major group design project.

Year four

Choice of a wide range of optional modules; major group design project and individual investigative project.

Optional modules

All undergraduates are offered a wide range of module options both within the department and in other disciplines. This provides greater opportunities for you in finding areas of special interest.

Accreditation

Our MEng degrees are accredited as fully satisfying the educational base for a Chartered Engineer (CEng). Our BEng degrees are accredited as fully satisfying the educational base for an Incorporated Engineer (IEng) and partially satisfying those for a CEng. A programme of accredited further learning will be required to complete the educational base for CEng. For further information see jbm.org.uk

Typical modules

Year one	Year two	Year three (BEng only)
<p>Core</p> <ul style="list-style-type: none"> ■ Geotechnics 1 ■ Hydraulics 1 ■ Mathematical Methods for Civil Engineering ■ Structural Analysis ■ Portfolio of Civil Engineering Studies 1: This module builds on core skills and aims to: introduce students to structural analysis and modelling tools; develop their ability to communicate; introduce construction materials and their related design considerations; provide an opportunity to learn advanced surveying techniques. ■ Group project: This is a problem-based group design project which focuses on the application of knowledge and skills, from across the taught modules. Groups develop and cost a major civil engineering project and plan resources to ensure timely and cost-effective completion of the work. 	<p>Core</p> <ul style="list-style-type: none"> ■ Advanced Mathematical Methods ■ Fundamentals of Materials ■ Geotechnics 2 ■ Hydraulics 2 ■ Structural Analysis 2 ■ Portfolio of Civil Engineering Studies 2: This module builds on core skills and aims to: introduce students to structural analysis and modelling tools; develop their ability to communicate; introduce construction materials and their related design considerations; provide an opportunity to learn advanced surveying techniques. ■ Group Project: In this group design project, the focus will be on the design of a steel-framed building - in this case a hall of residence on campus. The success of the project relies on the application of the skills and techniques which were learned in Year One core modules and workshops, supplemented by structural analysis skills you learn in year two. 	<p>Core</p> <ul style="list-style-type: none"> ■ Geotechnics 3 ■ Hydraulic Design and Experiments ■ Structural Concrete Design ■ Building Information Modelling (BIM) Project: You'll work in groups on the design and planning of a civil engineering project that aims to integrate all the disciplines covered on the course. Typical projects include: water works, major highway schemes and retail parks. Staff and visiting professional engineers provide guidance. ■ Individual Investigative Project: You will choose a project in your preferred discipline and plan a detailed investigation. Projects involve lab work, field investigations or computer modelling and require data collection and analysis. You are supervised by a member of academic staff who is an expert in the discipline.

Modules may change, for example due to curriculum developments. The above list is a sample of typical modules that we offer, not a definitive list. The most up-to-date information can be found on our website at nottingham.ac.uk/ugstudy/civil

Typical modules

Year three (MEng only)

Core

- Geotechnics 3
- Hydraulic Design and Experiments
- Structural Concrete Design
- Building Information Modelling (BIM) Project: You'll work in groups on the design and planning of a civil engineering project that aims to integrate all the disciplines covered on the course. Typical projects include: water works, major highway schemes and retail parks. Staff and visiting professional engineers provide guidance.

Optional

- Advanced Techniques in Ordinary Differential Equations
- Computerised Methods in Engineering
- Construction Practice
- Engineering Risk Management
- Mapping for Engineering Surveying and GPS
- Traffic Engineering

Year four MEng (MEng only)

Core

- Individual Investigative Project: You will undertake a long-term individual research project appropriate to your particular interests. It normally takes the form of an investigative, development or design project ending as a detailed final report. Projects involve lab work, field investigations or computer modelling and require data collection and analysis.
- Group Design Project: Working in groups, you'll design and plan a major civil engineering project. Typical projects include water works, major highway schemes and retail parks. Staff and visiting professional engineers provide guidance.

Optional

- Advanced Structural Analysis
- Advanced Structural Design
- Coastal Engineering
- Dynamics and Wind Engineering
- Environmental Fluid Mechanics
- Geotechnical Modelling
- Highway and Pavement Design
- Life Cycle Assessment
- Managing Infrastructure Systems
- Mapping for Engineering Surveying and GIS Practical
- Railway Technology
- Satellite-Based Positioning
- Sustainable Construction and Life Cycle Assessment

Modules may change, for example due to curriculum developments. The above list is a sample of typical modules that we offer, not a definitive list. The most up-to-date information can be found on our website at nottingham.ac.uk/ugstudy/civil

Degrees with a year in industry

A year in industry is a fantastic opportunity for you to practise and develop your engineering skills, providing valuable professional experience which is key to achieving Chartered Engineer status.

Benefits

A year in industry will give a significant boost to both employment and academic prospects. According to research previously conducted by High Fliers Research, more than a third of graduate jobs are being filled by candidates who already have work experience with that employer. Getting a year in industry placement is therefore a great way into the job market after graduation. The skills and maturity that students develop while out on placement have a positive impact on their final degree results, which of course further enhances employability.

Features

Placements are usually undertaken in the UK, but can be anywhere in the world in companies from major global organisations to smaller consultancies and technology specialists. During a placement, you are classed as an employee of the host company, and will receive a salary. There is a nominal fee for the placement year and you will remain fully registered with the University during this time.

Support

Our dedicated Industrial Placement Team works closely with the Careers and Employability Service to support you in finding the right placement. Companies also visit the University to recruit students for industrial placements.

The benefits of a year in industry are well recognised, and as such our degrees with an industrial year are very popular. Likewise, securing a year in industry placement is a highly competitive process, and you are responsible for submitting your own applications, which may include attendance at interviews and assessment centres. We therefore expect you to commit additional time over and above your academic studies to this process.

“During my industrial year, I developed my communication skills and gained a strong work ethic which really helped me in my final degree year. The experience gave me plenty to talk about on my application for my current position of Graduate Civil Engineer at ARUP.”

Joe Dodgson,
MEng Civil Engineering

Engaging study, incredible results

Students are taught through a combination of lectures, practical sessions and project work.

Teaching

The main forms of teaching are lectures, practical sessions and project work. These are supplemented by problem-solving classes, workshops and tutorials. For a typical week in your first year, you can expect to attend 15 hours of lectures and workshops and approximately five hours of other classes for Computer Aided Design (CAD), Building Information Modelling (BIM) and laboratory and project sessions. During your final year, you will undertake a major project which reflects your interests and those of your supervisor. This project is key to your development as an independent engineer.

Personal tutors

All students have a personal tutor who will review your academic progress each semester and who is also available to help with any personal matters. Tutorials take place initially on a weekly basis, typically in groups of four students in the first year. Tutorials can help to develop your communication skills, personal organisation and planning towards graduate employment.

Assessment

All undergraduate degree programmes in the University are modular, which means you undertake modules of study with assessment at the end of each semester, with most modules assessed using a mixture of coursework and exams. Some modules such as projects don't have any exams and students submit reports, portfolios or in some cases presentation for assessment. As well as written exams, we use eAssessments and eLearning approaches including quizzes and tests.

On a BEng course, your graduating mark is made up of 33% from your second year and 67% from your third year. If your third year is an industrial placement, your graduating mark is made up of 33% from your second year and 67% from your fourth year. On an MEng course, your graduating mark is made up of 20% from your second year, 40% from your third year and 40% from your fourth year. If your fourth year is an industrial placement, your graduating mark is made up of 20% from your second year, 40% from your third year and 40% from your fifth year.

Key Information Sets

Key Information Sets (KIS) are comparable sets of information about full or part-time undergraduate courses and are designed to meet the information needs of prospective students. All KIS data is published on the Unistats website: unistats.co.uk

A typical first-year undergraduate timetable

	9-10am	10-11am	11am- 12pm	1-2pm	2-3pm	3-4pm	4-5pm
Monday	Lecture: Structural Analysis		Tutorial/ example class	Practical sessions/group project/ private study			
Tuesday	Optional workshop			Free period	Optional workshop		
Wednesday	Lecture: Hydraulics 1		Tutorial/ example class	Free time for participation in sports, clubs and societies			
Thursday	Optional workshop			Free period	Optional workshop		
Friday	Lecture: Mathematical methods for civil engineering		Tutorial/ example class	Practical sessions/group project/ private study			



Outstanding careers support

Our courses have a strong focus on preparation for professional practice. Modules are designed to meet the standards set by industry.

98% 
of our research was judged to be of international quality

Research International Framework 2014

£24,500 
was the average starting salary*



Key employment sectors for our graduates are:

- production management
- architecture and town planning
- natural and social science industries
- surveyors
- technicians

Take your degree further

Our courses have a strong focus on preparation for professional practice: modules are designed to fulfil the requirements of engineering institutions and projects often have direct industrial relevance.

Our degrees are balanced and well-rounded and the majority of our graduates who do not continue in further education progress to professional careers in a wide range of engineering industries or in non-engineering sectors.

Amplify your potential

Whether you already have a plan or need some inspiration, your Careers and Employability Service is here to help.

Academic excellence and employability go hand in hand at Nottingham. Your course, and the diverse student experiences we offer, will enable you to develop the skills and professional competencies required to thrive in the job market of the future.

We will help you explore your options, so you feel confident making choices about what you want to achieve. Our team will support you as you build your CV, search for jobs, prepare applications, practise your interview technique, and much more.

Get the Advantage

The career-enhancing Nottingham Advantage Award recognises and rewards your extracurricular activities. With a choice of over 200 modules, you can hone the key skills employers are looking for. From developing your leadership skills and learning a language to public speaking and volunteering, you will leave university with demonstrable experience that sets you apart from other graduates. For further information, visit nottingham.ac.uk/careers/advantage

* Known destinations of full-time home undergraduates who were available for work 2016/17. Salaries are calculated based on the median of those in full-time paid employment within the UK.

 @UoNCareers

 CareersUoN

How to apply

How to apply

All applications for full-time undergraduate study at Nottingham, including applications by international students, must be made through UCAS.

You can apply online at ucas.com and will be notified of decisions through UCAS Track.

Your personal statement

This is the section of your UCAS form that tells us most about you, and you should make the best use of it. Be as specific and detailed as you can – we would like to see that you are a student who can work hard, be self-motivated and make the best possible use of the opportunities that our courses offer you. We would also like to hear about any skills you have gained through extracurricular activities.

Minimum entry requirements

Unless otherwise stated in individual course profiles, all UK applicants should have GCSE English grade 4 (C) as a minimum.

Alternative qualifications

In this brochure you will find our A level and International Baccalaureate entry requirements but we accept a much broader range of qualifications. For more details, visit nottingham.ac.uk/ugstudy/applying

Flexible admissions policy

In recognition of our applicants' varied experience and educational pathways, we employ a flexible admissions policy. If we judge that your situation has adversely affected your achievement, then we will consider this when

In 2019/20 the Core Bursary will offer up to £2,000 for each year of undergraduate study.* For more details, see nottingham.ac.uk/financialsupport
* To eligible home fee status students.

assessing your academic potential. Some courses may make a slightly lower offer. For more information about this policy, see nottingham.ac.uk/ugstudy/applying

Mature applicants

We encourage applications from mature students, who are defined as 21 years old and over. You should apply through UCAS. Find out more at nottingham.ac.uk/mature

International applicants

The University provides a range of information and advice for international applicants. If you are unable to attend an open day, we can meet you in your country at one of our overseas events or arrange an individual visit to the University. For further information please visit nottingham.ac.uk/international

Deferred entry

Applicants who wish to defer their entry by a year will not be at a disadvantage. Please tell us something about your plans for your gap year in your UCAS personal statement.

Equal opportunities policy

The University aims to create the conditions whereby students and staff are treated solely on the basis of their merits, abilities and potential, regardless of gender, race, colour, nationality, ethnic or national origin, age, socio-economic background, disability, religious or political beliefs, trade union membership, family circumstances, sexual orientation or other irrelevant distinction.

If you wish to declare a disability, please ensure that you have ticked the appropriate box on your UCAS application form. Disclosure of this information will not affect your application.

Experience it



Live and study abroad as part of your degree

nottingham.ac.uk/studywithus/studyabroad

Accommodation to suit every budget and personal choice

nottingham.ac.uk/accommodation



Around 15 minutes by tram or bus from the city for music, food and shopping

nottingham.ac.uk/nottinghamlife

300+

clubs, societies and opportunities

su.nottingham.ac.uk



Sports University of the Year 2019* with over 70 student sports clubs

nottingham.ac.uk/sport

* The Times and The Sunday Times Good University Guide, 2019.

Student Service Centres on all UK campuses for support and advice

nottingham.ac.uk/studentsservices



Join in with the vibrant musical life on campus and in the city

nottingham.ac.uk/music/performance



Choose from 8 modern languages to study alongside your course

nottingham.ac.uk/language-centre





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For undergraduate enquiries contact:
Student Recruitment Support Hub



+44 (0)115 951 5559



nottingham.ac.uk/enquire



NottinghamEngineering



@UoNEngineering

nottingham.ac.uk/civil

This publication is
available in
alternative formats:
+44 (0)115 951 5559



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This brochure has been drafted in advance of the academic year to which it applies. Every effort has been made to ensure that the information contained in this brochure is accurate at the time of publishing, but changes (for example to course content) are likely to occur given the interval between publication and commencement of the course. It is therefore very important to check our website for any updates before you apply for the course by following nottingham.ac.uk/ugstudy. Where there is a difference between the contents of this brochure and our website, the contents of the website take precedence.