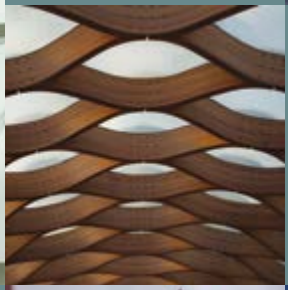
University of Nottingham
UK | CHINA | MALAYSIA

Architecture and Built Environment

Plan it



Design it

Perfect it

nottingham.ac.uk/abe
Undergraduate guide 2019

Contents

Design and build a new community project in Africa

as part of your degree

Top 5 in UK

for architecture

The Guardian University Guide 2018

Be inspired by our award-winning campuses

Our UK campuses have won 20 Green Flag Awards

98% of our research

was judged to be of international quality

Research International Framework 2014

Get hands-on experience

with a year out in industry

Expert academics

who are pushing forward the boundaries of the subject

Free field trips to Europe

for all first-year BArch Architecture and MEng Architecture and Environmental Design students

Guidance and advice

from your personal tutor, peer mentor and dissertation supervisor

You'll receive free materials

to help you with your studies on our BArch, MEng and MArch architecture courses

Architecture and Built Environment at Nottingham

As a leading centre for research and teaching in architecture, urban design, architectural engineering and sustainable energy technologies, the department is noted for its innovative approaches to creative problem solving informed by fundamental, applied research and collaboration with leading experts from practice and industry.

Facilities

Learning by doing is a key strength of our courses. Architecture students spend time in workshops and design studios working on a wide variety of projects, including working with real clients on our unique live projects in Africa. Students benefit from our extensive facilities including our new Centre for 3D Design, which offers specialised facilities for digital fabrication, laser cutting and 3D printing. Students also have access to the on-site Creative Energy Homes – a group of low-carbon houses built with industry partners, which demonstrate cutting edge design.

At a glance

- **BArch, MEng and MArch architecture students receive free materials as part of their course**
- **Ranked as a UK Top 5 university for architecture***
- **Ranked 9th in the UK for architecture****

Fieldwork

Field study trips abroad are seen as an essential component of architectural education, and all our first-year BArch Architecture and MEng Architecture and Environmental Design students spend time on a paid for week-long trip to Europe. Short two and three-day international study trips are also available to third and fourth year students as part of their major studio project. Longer international field trips are open to final year students on the MArch Architecture Part Two programme. Recent destinations have included Berlin, Helsinki and Porto.

** The Guardian University Guide 2018*
***The Complete University Guide, 2018*

Our courses

Degree title	UCAS code	Duration	A levels	IB
Single honours				
MEng Architecture and Environmental Design	K230	4 years	AAA	36
BArch Bachelor of Architecture	K100	3 years	AAA	36
BEng Architectural Environment Engineering	K240	3 years	AAB-ABB	34-32
MArch Architecture	K10I	2 years	ARB/RIBA accredited Part 1 degree at 2:1 classification.	

Required subjects

All courses: GCSE English, maths and physics or double science.

K230: At least one A level maths or physics is essential. Preferably students would have also taken chemistry, art or design and technology (a portfolio will be required). For A level subjects containing a practical examination, a pass in this element is also preferred.

K100: We prefer our students to have art or design and technology at A Level (or equivalent) but will consider students without. All students, before being offered a place, will be required to submit a digital portfolio of work.

K240: A level or Higher Level (IB) maths is essential. Other preferred subjects (for an offer of ABB) are physics, chemistry, biology, design and technology, geography, geology, computing or further maths. Otherwise offer is AAB. For A level subjects containing a practical examination, a pass in this element is also preferred.

K10I: An ARB/RIBA-accredited Part 1 degree at 2:1 standard. Admission will be subject to the submission of a full portfolio, letters of reference and a personal statement. Applicants may be invited to attend an interview.

Foundation courses

Applicants who are not eligible for direct entry to undergraduate study may be able to apply for foundation course. Find out more at **nottingham.ac.uk/foundationcourses**

English language requirements

IELTS 6.5 (no less than 6.0 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 presessional 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 presessional 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**

MEng Architecture and Environmental Design (ARB/RIBA Part 1)

If you are interested in studying architecture and have a skill and interest in environmental design then this is the course for you. This four-year interdisciplinary course provides an education in architecture with specialisation in the design of environmental systems for buildings. The course offers two routes to professional employment and is accredited by both architecture and engineering professional bodies.*

Year one

This year is structured around a core studio module that develops key design skills and techniques. Supporting modules cover fundamental ideas and concepts relating to environmental design, construction, structural design, and architectural theory. You will also be introduced to mathematical tools that support the design of environmentally responsible building systems.

Year two

You will study modules that explore the concepts behind the active and passive systems used to provide healthy, comfortable conditions for building occupants. The design studio serves as a forum to explore the application of these ideas and material covered in structures, construction and architectural history.

Year three

Studio projects offered in the third year seek to extend your ability to tackle briefs for more complex building types. These are linked to environmental systems modules that provide material to inform this work. Independent research skills are nurtured through completion of a dissertation, which allows you to develop a specialism in a relevant area of your choice.

Year four

The final year introduces advanced environmental design techniques that facilitate a holistic approach to design. The year culminates in the completion of a major studio project, where you will be expected to bring all of your skills in response to a brief for the design of a complex building.

By the end of year four

You will have developed key design and engineering skills and techniques. Studio projects will have extended your ability to tackle briefs for more complex building types and your independent research skills will have been developed.

* MEng graduates secure an Architects Registration Board (ARB)/Royal Institute of British Architects (RIBA) Part 1 qualification. MEng students can also attain Chartered Engineer status through Chartered Institute of Building Service Engineers (CIBSE) by gaining relevant experience in practice and completing a Professional Review Interview.

Typical modules

Year one	Year two	Year three	Year four
Core	**Core**	**Core**	**Core**
■ Architectural Humanities I	■ Architectural Humanities II	■ Advanced Study Dissertation	■ Architectural Humanities III
■ Design Studio 1A	■ Design Studio 2	■ Design Studio 3	■ Design Studio 4
■ Design Studio 1B	■ Electricity and the Built Environment	■ Differential Equations and Calculus for Engineers	■ Integrated Design in Architecture 3
■ Engineering Mathematics 1	■ Engineering Mathematics 2	■ Environmental Services Design 2	■ Integrated Environmental Design
■ Environmental Science for Architects 1	■ Environmental Sciences for Architects 2	■ Fluid Mechanics and the Built Environment 2	■ Practice and Management
■ Integrated Design in Architecture	■ Environmental Services Design 1	■ Integrated Design in Architecture 3	
■ People, Buildings, Landscape	■ Fluid Mechanics and the Built Environment 1	■ Tectonics 3	
■ Tectonics 1	■ Integrated Design in Architecture 2A	■ Thermodynamics and Heat Transfer 2	
	■ Simulation and Design		
	■ Tectonics 2A		
	■ Thermodynamics and Heat Transfer 1		

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/abe**

CIBSE RIBA

BArch Bachelor of Architecture (ARB/RIBA Part 1)

The three-year BArch course at Nottingham is based on creativity and technical rigour, and at its heart is the design studio. In years two and three students get to choose one of 10 studio units to work in that year, each with its own style, way of working and skills.

Year one

In your first year, you will be introduced to the main themes of the course: architectural design; structures; construction; environmental design; and the history and theory of architectural design. The programme will concentrate on introducing and developing the key skills, competence and knowledge necessary in the history and theory of architecture.

Year two

Studio projects in year two will have an added complexity. In addition to core modules, you will also be taught critical thinking skills, learn computer-aided design programmes and you will be offered the opportunity to broaden your architectural experiences by visiting construction sites and learning first-hand how other designers work. Students have the opportunity to study abroad in the second semester at another English speaking University across the world as part of the Universitas 21 scheme.

Year three

You will develop a thorough understanding of all the key themes and their holistic integration into design projects. Your role within the architectural profession will also be developed as part of the introduction of a further theme in practice and management.

By the end of year three

Graduates secure placements in a range of practice types ranging from the small and local to internationally recognised practices such as Rogers Stirk Harbour + Partners, Foster + Partners, Zaha Hadid Architects and Herzog and de Meuron. The extensive range of transferable skills developed also means that those not wishing to pursue architecture further are effectively prepared for alternative careers. Recent graduates have worked in theatre design, architectural journalism and academia.

On successful completion of the BArch degree, students automatically receive the ARB/RIBA Part 1 professional qualification. You may then continue with your architectural education, and work towards achieving professional architect status in the UK through at least six months of supervised professional experience and then continuing on to MArch Architecture (ARB/RIBA Part 2 – see page 12) and PGCert Professional Practice (ARB/RIBA Part 3). Successful completion of part three grants you professional architect status in the UK. These pathways are all offered by the University of Nottingham.

Typical modules

Year one	Year two	Year three
Core	**Core**	**Core**
■ Architectural Design Studio 1A	■ Architectural Design Studio 2A	■ Architectural Design Studio 3
■ Architectural Design Studio 1B	■ Architectural Design Studio 2B	■ Architectural Humanities III (Contemporary Debates)
■ Architectural Humanities I (History of Architecture)	■ Architectural Humanities II (Theory and Criticism)	■ Integrated Design in Architecture 3
■ Environmental Science for Architects 1	■ Environmental Science for Architects 2	■ Practice and Management
■ Integrated Design in Architecture	■ Integrated Design in Architecture 2A	
■ People, Buildings, Landscape	■ Integrated Design in Architecture 2B	
■ Tectonics 1 (Structures and Construction)	■ Tectonics 2A (Structures and Construction)	
	■ Tectonics 2B (Structures and Construction)	

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RIBA

> **Fom an early age I knew I wanted to study architecture and after visiting other universities, Nottingham offered everything I was looking for. One of the best aspects of my course is its industrial links, which provide placements with some of the best architectural practices in the UK.**
>
> Charlie Brackpool,
> BArch Bachelor of Architecture

BEng Architectural Environment Engineering

Architectural environment engineers create comfortable and efficient indoor environments using modern technologies and sustainable design.

Built on traditional building services engineering foundations, this forward-looking and challenging course addresses the increasing need for highly qualified engineers who can take a holistic approach to designing architectural environments for a low-carbon future.

Year one

In year one, you are introduced to the main themes of the BEng course: engineering fundamentals (mathematics, CAD, fluid and thermodynamics, electricity etc) and transferable skills (presentation and communication). The first year provides the principles required to develop an understanding and appreciation of the important connections between science, engineering, environmental design, building services and associated technologies.

Year two

Your knowledge and competencies in environmental design and building services systems are further developed in year two. Individual and group engineering design projects form the main core of the year with specialised subjects such as environmental performance modelling, acoustics, and lighting feeding into the design process.

The built environment in its wider context is considered in the study of renewable energy systems and project management is explored to provide wider transferable skills.

Year three

A final year engineering design module provides the opportunity to deliver a project with a stronger emphasis on building analysis, advanced environmental design and environmental performance modelling. This project is used to develop your skills and ability in utilising appropriate aspects of the material covered in years one, two and three. It also considers in more detail the holistic design of a building, its internal environment and the systems necessary to achieve a sustainable building. The choice of an optional module enables you to develop key engineering, science and management skills. The dissertation research project allows you to consider an area of research from a wide range of topics within the built environment. This project will develop your individual research skills, whilst working under the supervision of an academic supervisor.

By the end of year three

On completion of your degree, you will be equipped with multi-disciplinary skills and knowledge much needed by industry. Typical graduate jobs include; Sustainability Consultant; Building Services Engineer; Mechanical and Electrical Design Engineer; Energy Engineer and Building Simulation Engineer.

Typical modules

Year one

Core

- Architectural Engineering Design 1
- Architectural Engineering Design 2
- Electricity and the Built Environment
- Engineering Mathematics 1
- Engineering Mathematics 2
- Environmental Science for Architects 1
- Fluid Mechanics and the Built Environment 1
- Performance of Construction Materials
- Thermofluids 1

Year two

Core

- Acoustics and Lighting
- Architectural Engineering Design 3
- Architectural Engineering Design 4
- Control Systems of Built Environment
- Differential Equations and Calculus for Engineers
- Environmental Performance Modelling
- Fluid Mechanics and the Built Environment 2
- Introduction to Renewable Energy
- Project Management and Development
- Thermofluids 2

Year three

Core

- Architectural Engineering Design 5
- Computational Fluid Dynamics for the Built Environment
- Energy and Waste
- Principles of Refrigeration and its Applications
- Research Project
- Topics of Heat Transfer

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/abe**

CIBSE

“From programming to workshops and hands-on metalwork, my course is so diverse. I get to learn practical and theoretical skilss that I would need to succeed in industry.”

Mariam Habib,
BEng Architectural Environment Engineering

MArch Architecture (ARB/RIBA Part 2)

The Part 2 professional course in architecture provides the grounded architectural education that enables students to develop the core skills and specialist knowledge that are required to function in contemporary architectural practice.

The curriculum has been designed around 'vertical' peer-based studios with input from self-directed research in the areas of humanities as well as environment, technology and professional practice. The cumulative result is the preparation of our graduates for a lifelong career as an architect. The course is fully validated by the Architects' Registration Board (ARB) and the Royal Institute of British Architects (RIBA) and leads to exemption from Part 2 of the three-part qualification programme for professional architects in the UK.

Year one

For the first semester of year one you may choose different study pathways. In addition to remaining on campus, some students are accepted for distance learning while working in practice and a few places are open for international exchange with partner institutions internationally. While the learning outcomes are the same, each option suits diverse needs of prospective students.

During the second semester you will be tasked with a design project against a brief that situates the programme for a complex civic building within the live context of a real infill site. There is an emphasis on the craftsmanship of making and design conceptualisation, and by integrating inputs from the technical and professional practice streams, the process simulates current architectural work stages and practices.

Research is also a significant area of teaching. Over the course of both semesters in the first year, all students undertake a research project. The research topic is initiated out of a student's own particular architectural interests and each student receives tutelage from research-active staff on methods and critical thinking that will enable you to develop a thorough research paper.

Year two

The first year is intended as preparation for the design thesis that comprises the whole of year two. You will have the responsibility for defining your research focus, the site selection, assessment of relevant contexts and writing the programme as the result of these findings. You will then be tasked with developing a design proposal that demonstrates your thesis through form, space and materiality.

It is also expected that all students will invest time on their representation material, whether that be diagrams, drawings or models that are crafted by using the excellent workshop facilities at their disposal.

By the end of the course

You will have completed two parts of the three-part RIBA qualification programme for professional architects in the UK. MArch Architecture (ARB/ RIBA Part 2) graduates will typically enter employment within architectural practice and register on an ARB/RIBA Part 3 programme to complete their architectural education and gain entry to the profession. Details of the ARB/RIBA Part 3 Professional Practice programme can be found on the University's online postgraduate prospectus at **nottingham.ac.uk/pgstudy**

Typical modules

Year one

Autumn semester

Either semester in practice:

- Building Case Studies
- Culture and Context in Practice
- Professional Studies in Practice
- Record of Architectural Practice

Or university-based study:

- Architectural Urbanism Studio
- Design, Culture and Context
- Environment and Technology 1
- Professional Studies 1

Or undertake an exchange with a partner institution.

Spring semester

- Architectural Design Studio
- Environment and Technology 2
- Professional Studies 2

Year two

Core

- Diploma Thesis Studio

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/abe**

RIBA

Engaging study, incredible results

We use a variety of teaching methods and work with the latest technologies to create a vibrant study environment.

We use a combination of teaching methods depending on the topic which include:

- lectures
- demonstrations
- practical sessions
- small-group projects
- problem-solving classes
- workshops
- tutorials

Personal tutors

All students have a personal tutor. Personal tutors are members of academic staff in the school and they will:

- monitor your academic progress and check on your wellbeing
- provide exam marks and help you reflect on feedback
- act as a first point of contact for any guidance on academic or personal matters

At Nottingham, we still offer small-group tutorials of around six students. This ensures you have enough time to build a relationship with your tutor and benefit from their support. Your fellow tutees also provide peer support.

Additionally, the school has a dedicated Welfare Officer to help you adapt to university life and provide advice on more complex issues.

How will I be assessed?

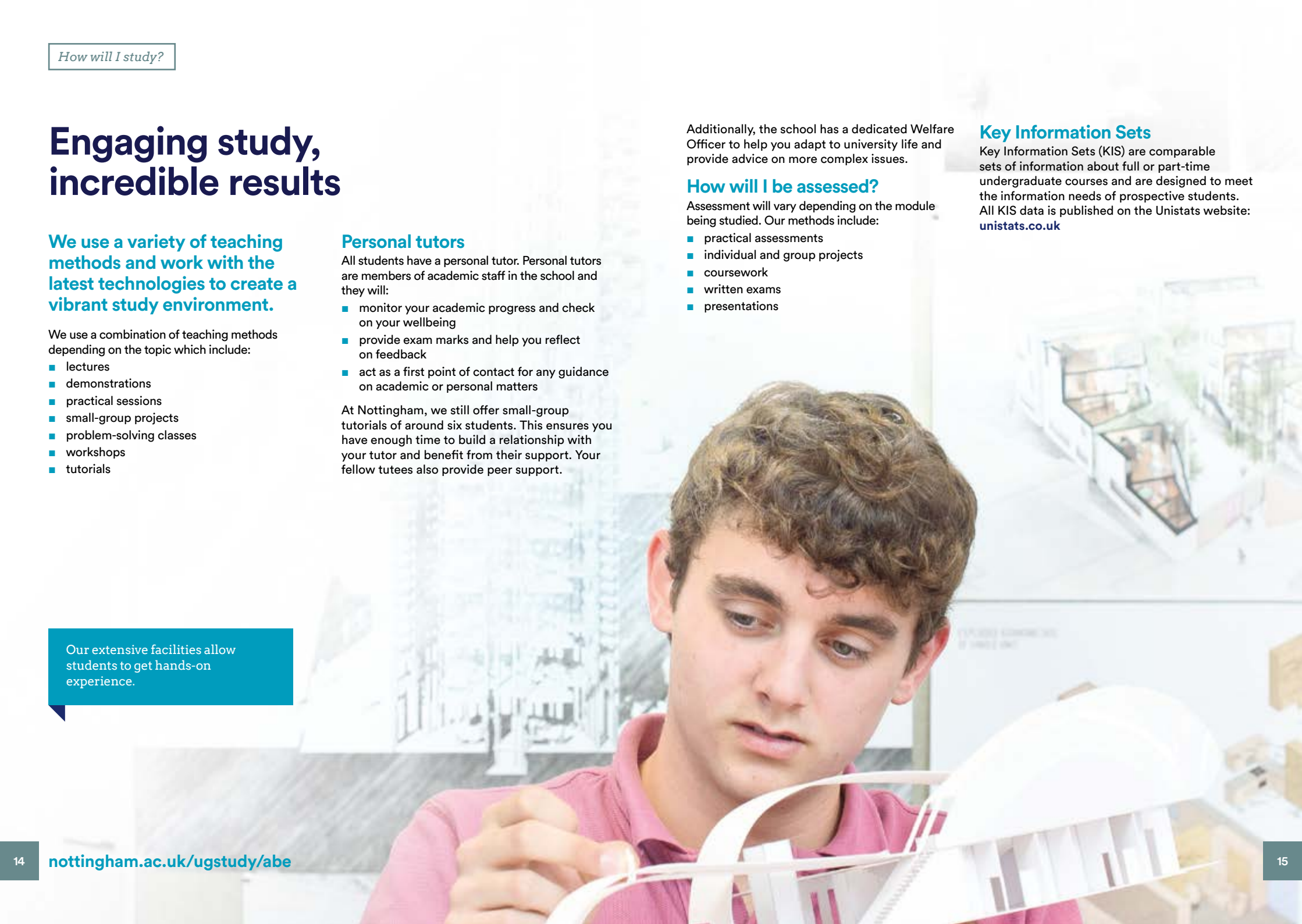
Assessment will vary depending on the module being studied. Our methods include:

- practical assessments
- individual and group projects
- coursework
- written exams
- presentations

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**

Our extensive facilities allow students to get hands-on experience.

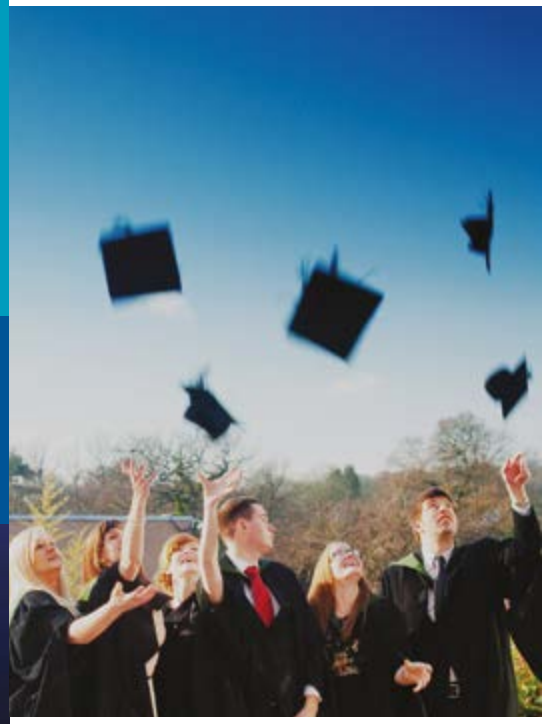


Outstanding careers support

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

95%
of undergraduates
from the department secured work or further study within six months of graduation*

£21,458
was the average starting salary with the highest being £28,000*



Key employment sectors for our graduates are:

- architecture and town planning
- design and development engineering
- building services and consultancy
- conservation
- interior designers

@UoNCareers
CareersUoN

Take your degree further

Our courses have a strong focus on preparing you 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 2015/16. Salaries are calculated based on the median of those in full-time paid employment within the UK.

How to apply

Around one-third of our UK students receive our means-tested core bursary, worth up to £2,000 a year (2018 entry figure; subject to change). For details, see **nottingham.ac.uk/financialsupport**

All applications for 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**

GCSE reform

Following the reform of GCSE grading in England from A*–G to 9–1, we have adopted Ofqual's recommended equivalence. This means that GCSE grade A*=9, A=7, B=5/6 and C=4. GCSE qualifications taken outside of the UK will still be graded A* to G.

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 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 applicants who have a significant gap in education. 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/go/international-applicants**

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.

Live and study abroad as part of many courses

nottingham.ac.uk/studywithus/studyabroad

Accommodation to suit every budget and personal choice

nottingham.ac.uk/accommodation

10 minutes from the city for music, food and shopping

nottingham.ac.uk/nottinghamlife

200+ student-led groups, clubs and societies at your Students' Union

su.nottingham.ac.uk

One of the UK's leading universities for sport* with over **70 student sports clubs**

nottingham.ac.uk/sport

* British Universities and Colleges Sports Standings, 2016-17.

Student Service Centres on all **UK campuses** for support and advice

nottingham.ac.uk/studentservices

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

nottingham.ac.uk/music/performance

Choose from 9 **modern languages** to study alongside your course

nottingham.ac.uk/language-centre

University of Nottingham
UK | CHINA | MALAYSIA

For undergraduate enquiries contact:
Student Recruitment Enquiries Centre

+44 (0)115 951 5559

nottingham.ac.uk/enquire

NottinghamEngineering

@UoNEngineering

nottingham.ac.uk/abe

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

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.