School of Architecture, Design and the Built Environment

# Architecture, Design and the Built Environment Course guide 2020

NOLLINGHAM

At NTU we focus on you.

Our gold-rated teaching experience is delivered by academic staff who have the knowledge and experience to support your vision. Your personal tutor and learning dashboard will help to make sure you stay on track.

The opportunities and connections we provide will enable you to shape your skills, knowledge and experience. From work placements and live projects, to volunteering and study abroad, all our courses are packed full of options to help your career get off to the best start.

You will receive an extraordinary education and a dynamic student experience in a vibrant learning environment with excellent facilities.

We are challenging traditions. Our teaching and work experience elevate each other, and our research is changing the world for the better. We treat our students as individuals, providing opportunities for all. It's one of the reasons why we have been named Guardian University of the Year 2019.

# NTU. University, reimagined



### Contents

BArch (Hons) Architecture	4
BA (Hons) Interior Architecture and Design	8
BSc (Hons) Architectural Technology	12
BEng (Hons) Civil Engineering	16
BSc (Hons) Civil Engineering	20
MEng (Hons) Civil Engineering Design and Construction	22
BSc (Hons) Construction Management	26
BSc (Hons) Quantity Surveying and Commercial Management	30
BA (Hons) Product Design	32
BA (Hons) Furniture and Product Design	36
BSc (Hons) Product Design	40
BSc (Hons) Building Surveying	44
BSc (Hons) Property Development and Planning	48
BSc (Hons) Real Estate	50
BSc (Hons) Property Finance and Investment	52





# Architecture, Design and the Built Environment

We develop your career from day one. Whether you're an aspiring designer, architect, civil engineer, surveyor or property and construction expert, we'll provide you the knowledge, tools and opportunities to establish yourself as a professional.

We've got an outstanding graduate employment record, built on many factors. These include the standard and relevance of our courses; the quality and international perspectives of our teaching; our incredible industry partnerships and commercial links; and our extensive professional accreditations.

Our courses are designed with industry partners and informed by our globally significant research, ensuring that current trends are at the forefront of your learning. From live industry projects to professional-standard facilities and work placements, you'll develop the skills needed to succeed in industry.

With access to inspiring and creative spaces, you'll be supported by our expert academic and technical teams. From the studios to the workshops, there's space and resource for you to work, learn, and develop your ideas. We're focused on your employability. Companies are looking for graduates with meaningful work experience – and our courses provide you with just that. Through work placements, coursework projects, site visits, visiting industry experts and guest lecturers, you'll have the opportunity to build your professional network and showcase your skills to some of the industry's key leaders.

Our BA, BSc, BEng and MEng courses all offer sandwich routes, so you'll have the opportunity to take a year-long placement as part of your studies. Arcadis, Laing O'Rourke and Foster + Partners are recent destinations for our students, while some have ventured overseas to gain experience in places like Dubai, Italy and the Netherlands.

Working on briefs from global companies like VolkerFitzpatrick, Savills and Speedo, you'll become adept at communicating your ideas, team working, and working to tight deadlines – all valuable industry skills.

We also give you the opportunity to experience different cities and cultures on study visits and residential trips. Our students have recently visited exhibitions and practices in Barcelona, Venice, Paris, Berlin and Milan.

Our courses are all accredited by professional bodies

#### We're ranked second in the UK for Building and Town and Country Planning

(Guardian League Tables 2019)

# Architecture (ARB / RIBA Part 1) BArch (Hons)

Take the first step to becoming a qualified architect on our creative, project-driven course. You'll be equipped with the skills and knowledge to tackle issues in the built environment and pursue a successful career in architecture.

#### Information

UCAS code: K100

Study mode: Full-time

Duration: Three years

Entry requirements:

- A-levels BBB; or
- BTEC Extended Diploma DDM; or
- 120 UCAS Tariff points from three A-levels or equivalent qualifications; and
- **GCSE** English and Maths grade C/4.

**Other requirements:** You'll need to submit a digital portfolio.

93% of BArch (Hons) Architecture students are in graduate level employment within six months of finishing their studies (Destination of Leavers from Higher Education Survey, 2016-17).

Accredited by:

RIBA #



#### About this course

On this course you'll develop into an industry-ready graduate prepared to tackle the modern challenges in architecture. Based in our Grade II\* listed Gothic Revival style Arkwright building in the heart of Nottingham, you'll benefit from our creative studio environment that encourages you to work collaboratively, share experiences and experiment with ideas.

You'll be exposed to diverse aspects of architecture, linking sustainability and urban design with business practice, and be given the freedom and resources to explore your own design approach and style. You'll learn the art of creative communication through drawing, model making and 3D visualisation in our studios and workshops.

Through experience of live industry projects and briefs, opportunities to exhibit your work and study trips in the UK and internationally. You'll learn to create imaginative and practical designs while developing essential skills in research, project coordination and problem-solving.

#### How you'll learn

Teaching and learning experiences include lectures, seminars, studio design sessions, tutorials and workshops. You'll learn from a team of academic staff with extensive experience in industry and expert technical staff who will be on hand to support you with your practical and project work.

#### Assessments

You'll be assessed through a range of practical-based methods. Coursework will make up most of your assessments, consisting of group and individual projects, reports and essays, and presentations to your peers. You'll receive feedback throughout each module.

#### Modules

#### Year One

#### **Design Studio** 60 credit points

You'll be introduced to small-scale design project work exploring the three-dimensional qualities of space. This module offers an integrative approach to a range of factors that influence architectural design development and promotes the critical and reflective appraisal of proposals.

#### Technology and Environment in Architecture 1 20 credit points

An introduction to a range of technical, practical and environmental principles involved in the making of domestic-scale architecture. The module provides a framework for understanding the environmental impact in a UK context. You'll explore using design and construction to achieve control of heat, light, sound and ventilation within buildings.

#### Architecture in Context 1 20 credit points

You'll be introduced to historical cultural themes within an architectural framework that relate to the contemporary built environment. You'll learn to recognise and engage with architectural responses to key societal influences.

#### Architectural Communication and Representation 20 credit points

This lecture and studio-based module introduces visualisation techniques and issues using traditional and digital media. Working alongside the Design Studio module, you'll explore essential graphic and visual communication techniques and both 2D and 3D methods.



#### Integrated Design Studio

60 credit points

Learn to communicate visually, orally and in writing on projects set in a range of design contexts related to mediumscale buildings. You'll creatively assess spatial and building design within a range of urban, physical, technical, economic, social, ethical and cultural settings.

# Technology and Environment in Architecture 2

20 credit points

You'll extend your knowledge of the technical, practical and environmental principles of architectural design. You'll develop your ability to communicate the relevant information regarding medium-sized buildings to the range of stakeholders in a design process.

#### Architecture in Context 2 20 credit points

Develop your critical response to theories related to contemporary and emerging architecture, the arts and urban design, on both global and local levels. You'll investigate the exploration of emerging diverse cultures and communities and their influence on architectural legacies.

## **Interdisciplinary Design Studies** 20 credit points

You'll be exposed to a range of professional and creative disciplines, widening your appreciation of the field of design. Your understanding of architecture will be better situated within the wider context of a humanistic comprehension of space.

#### **Final Year**

# **Comprehensive Design Studio** 60 credit points

You'll work on larger-scale or complex projects designed to test your ability to engage with multiple issues simultaneously. These include the integration of architectural design, technology and environmental considerations, and the awareness of cultural context, management practices, financial factors and legal constraints.

# Technology and Environment in Architecture 3

20 credit points

Through studio-based projects, you'll investigate material possibilities and design, build and test physical and digital models in simulated conditions. You'll use your findings to define and justify your technical design proposals, considering cost, environmental and sustainability factors.

#### Architecture in Context 3 20 credit points

You'll explore key issues from the history of philosophy, social theory and modern thought through a dedicated seminar series. This will enable you to develop a series of interpretive frameworks through which you'll analyse, criticise and debate architecture.

#### **Professional Practice**

20 credit points

This module will prepare you for professional practice in the UK. You'll develop your understanding of architecture industryw and regulatory frameworks in the context of professional practice and building delivery processes in the construction industry.

#### Exhibiting

In your final year, you'll showcase your work to the creative industries at a range of events including the NTU Art and Design Degree Show and NTU's Architecture Exchange event, attended by architecture professionals, industry experts and potential employers.

#### Your future career

On completion of your degree you'll gain ARB/RIBA Part 1 and you'll be ready to complete your first year of work experience, before starting Part 2 on route to becoming a qualified architect. Recent graduate roles include architects, architectural assistants and design team members at companies such as Benoy, rg+p Ltd., Dixon Jones and Terry Farrell & Partners.

To find out more about this course visit ntu.ac.uk/courses and search for Architecture.



# Interior Architecture and Design BA (Hons)

This creative course is designed to explore the design and development of internal spaces in relation to their overall architectural composition. You'll develop an understanding of how form, light and structure are used to create spaces that are both beautiful and functional.

#### Information

**UCAS code:** K1W2 (full-time) or W250 (sandwich)

Study mode: Full-time / Sandwich

**Duration:** Three years full-time or four years with a sandwich year

#### Entry requirements:

- · A-levels BBB; or
- BTEC Extended Diploma DDM; or
- 120 UCAS Tariff points from three A-levels or equivalent qualifications; and
- **GCSE** English and Maths grade C/4.

**Other requirements:** You'll need to submit a digital portfolio.

91% of our BA (Hons) Interior Architecture and Design full-time students are in employment or further study within six months of finishing their studies (Destination of Leavers from Higher Education Survey, 2016-17).

#### Accredited by:



#### About this course

We'll enable you to discover, develop and define yourself and the space around you. In a studio culture that reflects modern practice, you'll learn to creatively communicate your ideas through presentation, drawing and modelling. The course's teaching and learning culture is reflective of professional architecture and interior design practice, encouraging teamwork, collaboration and experimentation.

Based in our Grade II\* listed Gothic Revival Style Arkwright building, you'll develop your understanding of three-dimensional potential, the re-modelling of existing spaces and the influence of historical movements in interior architecture and design on contemporary practice.

Through live industry projects and briefs, guest lectures from visiting experts and study trips in the UK and overseas, you'll develop your portfolio of work and the skills and experience needed to progress in your career. You'll also have the opportunity to undertake a year-long placement during Year Three of your course, and benefit from our existing networks in the architecture and design industries.

#### How you'll learn

Your learning experiences will take the form of design studio sessions, lectures, seminars, tutorials and workshops, self-directed project work, and site visits. You'll be taught by our team of academic staff who have extensive experience in industry, and supported by our expert team of technical professionals.

#### Assessments

You'll be tested through a range of practical based methods. Coursework will make up all of your assessment, consisting of group and individual design projects, reports, presentations and panel discussions, essays and portfolios.

#### Modules

#### Year One

#### **Design Studio 1** 60 credit points

This studio-based module will introduce you to a range of design principles, encouraging you to explore design through a series of projects.. You'll explore three-dimensional form, space and order through various means.

### Design Communication 1

20 credit points

This studio-based module will encourage you to develop the communication of your design ideas. You'll be introduced to a range of visualisation techniques using orthographic drawing, digital media and model making. You'll improve your hand-drawing skills through a range of activities.

#### Technical Studies 1

20 credit points

You'll be introduced to the range of structural, technical, practical and environmental principles involved in the making of buildings. You'll begin to develop an understanding of the impact buildings and their construction can have on the user's experience.

#### **Interior Architecture in Context 1** 20 credit points

Explore how wider social issues – such as politics, the economy and technology – can influence architecture, and have done so historically. You'll also learn to recognise and engage with architectural responses to these issues.



#### Design Studio 2

60 credit points

You'll work to detailed briefs focused on structural, material, environmental and experiential issues. You'll also focus on a design project, developing proposals that specifically consider finishes, materials, and ergonomic needs.

#### Professional Studies and Design Communication 2 20 credit points

Explore the essential graphic and visual communication techniques required to meet industry requirements, complete a design portfolio, and allow the communication of studio-based projects. This module works in tandem with Design Studio 2.

#### **Technical Studies 2**

20 credit points

Develop your understanding of building elements – foundations, walls, floors and roofs – and their different types and functions. You'll also further your appreciation of a range of building materials, including interior elements such as lighting materials, and apply your knowledge of construction regulations.

## **Interior Architecture in Context 2** 20 credit points

Develop your knowledge of – and critical responses to – theories related to contemporary and emerging architecture and urban design, both globally and locally. You'll explore issues of cultural diversity and the impact this has on the built environment.

#### Year Three

By choosing our sandwich (four-year) route, you'll be able to undertake a year-long work placement during your studies. These are competitive positions secured through interviews and assessment. Recent placement destinations include Foster + Partners, The Body Shop and KSS Architects.

Successful completion of the placement year leads to an extra qualification – the Diploma in Professional Practice.

#### **Final Year**

#### **Design Studio 3**

60 credit points

You'll be challenged to define your own individual approach to design through a series of structured projects. You'll be encouraged to research, analyse, process, realise and communicate. You'll respond creatively to small exploratory projects, and to larger and more complex spatial interventions.

## **Design Communication 3** 20 credit points

Develop your orthographic drawing to an advanced level using a range of different 2D and 3D media. You'll also explore graphic and visual communication techniques relating to the communication of a design project.

## **Technical Studies 3** 20 credit points

You'll learn to integrate research into your designs, in support of the project you'll develop as part of the Design Studio module. You'll deepen your technical understanding of areas that include acoustics, lighting, structure and material studies.

#### **Research Project**

20 credit points

You'll conduct a thorough research investigation that explores a subject of personal interest. You'll present your findings on topics and debates of significance, constructing a developed argument through critical debate and analysis.

#### Exhibiting

In your final year, you'll showcase your work to the creative industries at a range of events including the NTU Art & Design Degree Show, NTU's Architecture Exchange event and Free Range in London, attended by architecture professionals, industry experts and potential employers.

#### Your future career.

Our students have graduated into roles such as junior designers, interior designers and consultants at companies including BDP, Tom Dixon Studio, Dalziel & Pow, FITCH, Macaulay Sinclair, Lungfish Architects and Leonard Design Architects.

To find out more about this course visit ntu.ac.uk/courses and search for Interior.



# Architectural Technology BSc (Hons)

Architectural technologists bring ideas to life – from concept and design to development and completion. As a technical member of design teams, you'll be responsible for ensuring that designs are buildable, sustainable, economical and maintainable.

#### Information

**UCAS code:** K130 (full-time) or K101 (sandwich)

Study mode: Full-time / Sandwich

**Duration:** Three years full-time or four years with a sandwich year

#### Entry requirements:

- A-levels BCC
- BTEC Extended Diploma DMM
- **104 UCAS Tariff points** from three A-levels or equivalent qualifications; and
- **GCSE** English and Maths grade C/4.

96% of our BSc (Hons) Architectural Technology sandwich students are in graduate level employment within six months of finishing their studies (Destination of Leavers from Higher Education Survey, 2016-17).









#### About this course

Our course is your gateway to a career in the architecture industry. You'll experience live projects with real clients, studio work, guest lectures from industry leaders, and exciting placement opportunities. You'll learn how buildings are created, constructed and managed and develop a practical and imaginative approach to design, equipped with the skills to create efficient design solutions.

You'll study in a studio culture that reflects modern architecture practice, preparing you for your graduate career from day one. You'll learn how buildings are created, constructed and managed, developing a practical yet imaginative approach.

On this dynamic course, you'll learn how to deliver practical integrated projects that take multidisciplinary elements into consideration. You'll develop excellent visual communication skills using the latest software and, through live projects and presentations, you'll build confidence in presenting your ideas to audiences.

#### How you'll learn

Your learning experience will include lectures, seminars, tutorials, workshops, and self-directed project work. You'll learn from a team of academic staff with extensive experience in industry, and you'll have expert technical staff on hand to support you with your practical and project work.

#### Assessments

You'll be assessed through a range of practical-based methods including coursework, practical exercises and exams. Coursework will make up most of your assessment, consisting of group and individual design projects, e-tests, presentations to your peers, and visual essays.

#### Modules

#### Year One

#### **Technology and Design Studio 1** 40 credit points

An introduction to the concept of a studio-based working environment. You'll work on a number of projects throughout the year, exploring the technical aspects associated with building environments. You'll look at the factors that influence building designs and learn how to critically appraise construction solutions.

#### **Construction Technology 1** 20 credit points

An introduction to a range of technical, practical and environmental principles involved in the making of structures. This provides a framework for understanding the environmental impact of buildings and the creation of a sustainable built environment.

#### **Integrated Design Communication 1** 20 credit points

This module will introduce you to a range of design communication skills. You'll develop a basic understanding of Building Information Modelling (BIM) through the application of hand drawing, model making and computeraided design (CAD) software.

#### Architecture in Context

20 credit points

Explore how wider social issues – such as politics, the economy and technology – can influence architecture, and have done so historically. You'll also learn to recognise and engage with architectural responses to these issues by studying a variety of historical and cultural themes.



#### Architectural Science and Building Engineering 20 credit points

An introduction to the principles underlying the operation and functioning engineering services associated with domestic buildings. You'll explore sustainability and green buildings, and aspects of their functionality in practice.

#### Year Two

#### **Technology and Design Studio 2** 20 credit points

Through studio-based working you'll explore the technical aspects associated with building environments and performance requirements. You'll identify quality control mechanisms and explore options in the selection of building materials, construction methods and environmental services.

#### **Construction Technology 2** 20 credit points

Further your understanding of the technical, practical and environmental principles of architectural design. You'll become familiar with a number

fou il become familiar with a number of alternative solutions to meeting the technical and human demands of architectural projects.

#### **Integrated Design Communication 2** 20 credit points

Develop your design communication skills and understanding of BIM using CAD software, environmental modelling, and other visualisation techniques. You'll also gain an understanding of the challenges associated with using digital media.

# Planning, Development and Surveying

20 credit points

Explore the ways in which the built environment is planned, surveyed and developed. You'll examine the constraints on the creation and management of buildings, spaces and place.

# Contract Administration: Control and Finance

20 credit point

Develop your understanding of this key area of architectural technology by studying topics related to the administration of construction-related contracts. You'll apply your knowledge of the practices and procedures to industry-related scenarios.

#### Year Three

By choosing our sandwich (four-year) route, you'll be able to undertake a year-long work placement during your studies. These are competitive positions secured through interviews and assessment. Recent placement destinations include Foster + Partners, Orme Architecture and Waldeck Consulting.

Successful completion of the placement year leads to an extra qualification – the Diploma in Professional Practice.

#### **Final Year**

#### **Technology Design Studio 3** 40 credit points

This module enables you to design and technically develop a scheme within the built environment. You'll produce a report of your development ideas, and illustrate it with drawings, models and other electronic techniques.

### **Construction Technology 3** 20 credit points

This module is an opportunity to fully explore issues relating to your major research project. You'll integrate into your studio work your research and your understanding of areas including acoustics, lighting, structure and material studies.

#### **Integrated Design and Communication 3** 20 credit points

Gain a critical understanding of BIM and integrated project delivery, and their application in the construction industry. Develop hands-on skills and experience in generating collaborative design models, and in merging models for design coordination and clash detection.

#### Professionalism and Employability 20 credit points

Further your skills in the design, planning and implementation of development projects. You'll develop an appreciation of design character and the way in which historic and contemporary buildings and spaces are used. You'll also learn about the constraints that apply to today's construction industry.

#### **Research Project**

20 credit points

You'll conduct research into a topic of interest and use it to inform a major piece of academic writing. You'll base it on a subject area appropriate to architectural technology, focused on an area of your own choosing.

#### Exhibiting

In your final year, you'll showcase your work to the creative industries at a range of events including the NTU Art and Design Degree Show and NTU's Architecture Exchange event, attended by architecture professionals, industry experts and potential employers.

#### Your future career

Many graduates from this course work as technologists and designers, whilst others work within wider roles in contract management, surveying and estimating. Our students have graduated into companies including Benoy, Gensler and Pozzoni Architecture Ltd.

To find out more about this course visit **ntu.ac.uk/courses** and search for Architectural Technology.



# **Civil Engineering** BEng (Hons)

Civil engineers play an essential role in society, designing and building major infrastructures such as roads, buildings, airports, tunnels, dams, bridges and water supply systems.

#### Information

UCAS code: H203 (full-time) or H200 (sandwich)

Study mode: Full-time / Sandwich

**Duration:** Three years full-time or four years with a sandwich year

#### Entry requirements:

- A-levels BBB including Maths and excluding General Studies (A-level Maths Grade C will be accepted providing the overall tariff points are met); or
- BTEC Extended Diploma DDM and A-level Maths Grade C; or
- BTEC Extended Diploma DDM including Maths for Technicians, and Further Maths for Technicians modules; or
- **120 UCAS Tariff points** from three A-levels or equivalent qualifications, including A-level grade C equivalent in Maths and excluding General Studies; and
- **GCSE** English and Maths grade C/4.

100% of our BEng (Hons) Civil Engineering sandwich students are in graduate level employment within six months of finishing their studies (Destination of Leavers from Higher Education Survey, 2016-17).

Accredited by:



#### About this course

This course will develop your understanding of engineering principles, together with the ability to apply them to solve real-world practical problems. You'll develop highquality technical abilities alongside the key people management skills required to be a successful civil engineer.

This is a hands-on course, and you'll develop advanced mathematical understanding. Through theory, practical projects and work placement opportunities, you'll be prepared to contribute to the design of the built environment. You'll develop your understanding of design, sustainability and health and safety essential for the industry, and be prepared to take on the challenges of developing and maintaining the infrastructure required by the world at large.

This BEng (Hons) qualification fully meets the academic requirements to achieve Incorporated Engineer (IEng) status, and in part for Chartered Engineer (CEng) status. To achieve these titles, you'll also need to be able to demonstrate your commitment and experience of professional competences, generally developed through working in industry.

#### How you'll learn

Your learning experiences will include lectures, seminars, laboratory practical exercises, workshop tutorials, fieldwork, and IT sessions. You'll learn from a team of academic staff with extensive experience in industry, and you'll have expert technical staff on hand to support you with your practical and project work.

#### Assessments

You'll be assessed through a range of practical-based methods and exams. Coursework will make up most of your assessment, consisting of group and individual projects, reports, essays, presentations and practical work.

#### Modules

#### Year One

#### **Civil Engineering Design Projects** 40 credit points

You'll be introduced to the organisation of the construction industry and the key roles played by civil engineering professionals. You'll develop your skills and your knowledge of construction techniques and processes, CAD, health and safety, and sustainability and the environment.

#### **Engineering Materials**

20 credit points

An introduction to the materials encountered in civil engineering and general construction. You'll look at geology, soil mechanics, steel, concrete and organic materials, and develop an understanding of their properties and applications.

#### Engineering Surveying

20 credit points

You'll be introduced to the basic principles and purposes of engineering surveying. You'll learn how to use standard surveying equipment, how to set out and control construction works, and how to measure existing terrain and features.

#### Introduction to Structural Engineering

20 credit points

You'll form a quantitative and qualitative appreciation of structural elements, loadings, and the behaviour and design of beams and triangulated frameworks. You'll also develop your knowledge of statistical analysis.

#### Engineering Mathematics and Mechanics 20 credit points

Learn a comprehensive range of mathematical techniques that underpin many of the analytical parts of civil engineering. This module will provide the foundation for more advanced techniques in Year Two.



#### Structural Analysis, Design and Detailing 40 credit points

An introduction to the structural behaviour of elements in reinforced concrete and steelwork structures. You'll consider their design and detailing to relevant codes of practice and look at new and emerging technologies in the construction industry.

#### **Construction Practice and the Environment** 20 credit points

Improve your knowledge of industry practice and the roles and responsibilities that you may assume in your placement year and beyond. You'll look at key areas including project organisation, procurement, programming, management, document administration, and health and safety.

#### Integration of Engineering Applications

20 credit points

Study new and emerging technologies within the construction industry. You'll apply your knowledge of engineering surveying, CAD, and BIM. You may work in a project group with students from different years to produce a scheme design related to your study.

#### Further Engineering Mathematics and Fluid Mechanics

20 credit points

Advance your knowledge of relevant engineering mathematics and mechanics. You'll look at probability, calculus, vectors and matrices and fluid mechanics including dimensional analysis, flow through pipes and hydraulic machinery.

## **Ground Engineering** 20 credit points

Develop your understanding of fundamental soil and geological properties, and how to measure and test them. You'll test different geological and geotechnical materials, allowing you to recognise and investigate ground-related problems and hazards.

#### Year Three

By choosing our sandwich (four-year) route, you'll be able to undertake a year-long work placement during your studies. These are competitive positions secured through interviews and assessment. Recent placement destinations include VolkerFitzpatrick, nmcn, BAM Nuttall, Aarsleff Ground Engineering and Plowman Craven.

Successful completion of the placement year leads to an extra qualification – the Diploma in Professional Practice.

#### **Final Year**

## **Individual with Group project** 40 credit points

An introduction to the structural behaviour of elements in reinforced concrete and steelwork structures. You'll consider their design and detailing to relevant codes of practice and look at new and emerging technologies in the construction industry.

#### Infrastructure Engineering 1 20 credit points

Broaden your understanding of the wider urban environment through the introduction of infrastructure topics. You'll study areas including asset management, transport, highways, rail and water, all in the context of sustainable developments. You'll also look at key applications of environmental legislation.

# **Further Structural Design** 20 credit points

Advance your understanding of the design of structural frameworks and assess their stability. You'll have the opportunity to design a structure from the initial stages to completion, using the most common methods of providing robustness to framed structures.

# Further Geotechnical Engineering and Design

20 credit points

You'll learn to analyse typical engineering problems involved in the construction of geotechnical structures. You'll develop informed solutions in line with current design standards and industry approaches.

#### Professional Responsibilities and Development in Civil Engineering 20 credit points

This module is based around four key themes that you'll encounter in industry. These are health, safety and welfare, the profession and wider society, clients, stakeholders and communities and government and sustainability. The aim is to gain a grounding in these areas to prepare you for graduate roles.

#### Your future career

Civil engineering graduates are heavily sought after and often have the chance to work across the world. Recent NTU graduate destinations include Jackson Civil Engineering, AECOM, J Reddington, Winvic Construction and APR Services.

To find out more about this course visit ntu.ac.uk/courses and search for Civil Engineering.



# **Civil Engineering** BSc (Hons)

Civil engineers find ways to solve real-world problems, developing the physical infrastructure to allow for societies to exist and develop – from bridges to tunnels, and roads to hospitals.

#### Information

**UCAS code:** H201 (full-time) or H202 (sandwich)

Study mode: Full-time / Sandwich

**Duration:** Three years full-time, four years with a sandwich year or up to four years part-time

#### Entry requirements:

- A-levels BCC; or
- BTEC Extended Diploma DMM; or
- **104 UCAS Tariff points** from three A-levels or equivalent qualifications; and
- **GCSE** English and Maths grade C/4.

To apply for the part-time route you'll need to apply direct to the University. Visit **ntu.ac.uk/apply** to submit your application.

95% of our BSc (Hons) Civil Engineering sandwich students are in employment or further study within six months of finishing their studies (Destination of Leavers from Higher Education Survey, 2016-17).

Accredited by:



#### About this course

This course provides a broad civil engineering education and will give you the design, analysis and construction skills needed for the industry. You'll be equipped with the abilities necessary for developing sustainable and costeffective design ideas. Through live projects, a residential field trip, site visits and a work placement year, the course will give you the skills needed to begin a successful career.

You'll gain a sound understanding of mathematical and practical engineering techniques and learn to find innovative solutions to real-world situations. Throughout the course you'll learn about structures, materials, geotechnics and mathematics – all essential for your graduate career.

This BSc (Hons) qualification fully meets the academic requirements to achieve Incorporated Engineer (IEng) status. To achieve this title, you'll also need to be able to demonstrate your commitment and experience of professional competences, generally developed through working in industry.

#### How you'll learn

Your learning experiences will include lectures, seminars, laboratory practical exercises, workshop tutorials, fieldwork, and IT sessions. You'll learn from a team of academic staff with extensive experience in industry, and you'll have expert technical staff on hand to support you with your practical and project work.

#### Assessments

You'll be assessed through a range of practical-based methods including coursework, practical exercises and exams. Coursework will make up most of your assessment, consisting of group and individual projects, reports and essays, presentations to your peers, and practical work. You'll receive feedback throughout each module.

#### Modules

#### Year One

#### **Civil Engineering Design Projects** 40 credit points

You'll be introduced to the organisation of the construction industry and the key roles played by civil engineering professionals. You'll develop your skills and your knowledge of construction techniques, CAD, health and safety, and sustainability and the environment.

#### **Engineering Materials**

20 credit points

An introduction to the materials encountered in civil engineering and general construction. You'll look at geology, soil mechanics, steel, concrete, and organic materials, and develop an understanding of their properties and applications.

## **Engineering Surveying** 20 credit points

20 credit points

You'll be introduced to the basic principles and purposes of engineering surveying. You'll learn how to use standard surveying equipment, how to set out and control construction works, and how to measure existing buildings.

#### Introduction to Structural Engineering 20 credit points

You'll form a quantitative and qualitative appreciation of structural elements, loadings, and the behaviour and design of beams and triangulated frameworks. This module will also develop your knowledge of statistical analysis.

#### Mathematics

20 credit points

A thorough introduction to mathematics and statistics in relation to civil engineering. You'll improve and develop your application of mathematics in typical civil engineering tasks.

## **Civil Engineering Construction** 20 credit points

You'll explore a range of techniques, materials, equipment and processes used in the design and construction of civil engineering projects. You'll explore the applicability of these techniques and their efficiency, cost, practicality, quality, sustainability, and environmental impact.

# Construction Practice and the Environment

20 credit points

Improve your knowledge of industry practice and the roles and responsibilities that you may assume in your placement year and beyond. You'll look at key areas including project organisation, procurement, programming, management, document administration and health and safety.

#### Engineering Skills

20 credit points

Further develop your IT skills in relation to civil engineering. You'll consolidate and develop your ability in the use of surveying instrumentation as well as associated field and office procedures including CAD and BIM.

## **Further Engineering Mathematics** 20 credit points

This module will help you develop the mathematical and statistical skills appropriate for civil engineering at a higher level. It will improve your confidence in the application of mechanics, calculus, matrix algebra, and statistics.

#### Ground Engineering

20 credit points

Develop your understanding of fundamental soil and geological properties, and how to measure and test them. You'll test different geological and geotechnical materials, allowing you to recognise and investigate ground-related problems and hazards.

#### Structural Engineering

20 credit points

You'll be introduced to the structural behaviour of elements in reinforced concrete and steelwork, exploring factors influencing the design of reinforced concrete structural elements.

#### Year Three

By choosing our sandwich (four-year) route, you'll be able to undertake a year-long work placement during your studies. These are competitive positions secured through interviews and assessment. Recent placement destinations include Jackson Civil Engineering, AECOM, Smithers Purslow, Curtins Consulting and J Reddington.

Successful completion of the placement year leads to an extra qualification – the Diploma in Professional Practice.

#### **Final Year**

#### **Individual with Group Project** 40 credit points

You'll develop your ability to interpret and develop project briefs, and to analyse the concepts and solutions related to it. This module allows you to demonstrate initiative, creativity and innovation in the development of solutions to problems related to civil engineering.

# Management and Transportation Studies

20 credit points

You'll focus on two main themes: management theory and practice within the construction industry, and transport policy. You'll learn about areas such as marketing, pitching and tendering, and you'll broaden your knowledge of the wider discipline, developing skills useful for graduate roles.

## Further Structural Engineering 20 credit points

This module will broaden your knowledge of the conceptual design of structural elements. You'll be introduced to the factors that affect the stability of framed building structures, and the common methods used to ensure their robustness.

#### **Ground Engineering, Water Resources and the Environment** 20 credit points

Within the context of sustainable development, you'll study geotechnical, environmental and water resource issues in civil engineering. You'll analyse typical engineering problems involved in construction projects.

#### Professional Responsibilities and Development in Civil Engineering 20 credit points

This module is based around four key themes that you'll encounter in industry. These are: health, safety and welfare; the profession and wider society; clients, stakeholders, communities and government; and sustainability. The aim of this module is to prepare you for graduate roles in industry.

To find out more about this course visit ntu.ac.uk/courses and search for Civil Engineering.

# **Civil Engineering Design and Construction** MEng (Hons)

This degree gives you the comprehensive knowledge and skillset needed to prepare you for a rewarding career in the built environment. You'll develop a critical appreciation of civil engineering principles and theory and gain analytical and practical engineering skills and techniques.

#### Information

**UCAS code:** 7H27 (full-time) or 5H47 (sandwich)

Study mode: Full-time / Sandwich

**Duration:** Four years full-time or five years with a sandwich year

#### Entry requirements:

- A-levels ABB including Maths and excluding General Studies (A-level Maths Grade C will be accepted providing the overall tariff points are met); or
- BTEC Extended Diploma DDM and A-level Maths Grade C; or
- BTEC Extended Diploma DDM including Maths for Technicians, and Further Maths for Technicians modules; or
- 128 UCAS Tariff points from three A-levels or equivalent qualifications, including A-level grade C equivalent in Maths and excluding General Studies; and
- **GCSE** English and Maths grade C/4.

#### Accredited by:







### About this course

On this course you'll study the same first three (full-time) or four (with placement) years as the BEng (Hons) Civil Engineering course. Your additional year is full of advanced study including a large integrated design project based on laboratory or field work.

You'll develop knowledge and skills in architectural and building technology, the environment, health and safety, CAD, hydraulics, ground engineering, and structural engineering. You'll look at creativity and innovation in engineering and gain a deeper understanding of engineering principles and practice.

This degree fully satisfies the educational requirements for Chartered Engineer (CEng) status. CEng status can give you the opportunity to influence and work on a huge range of projects worldwide and earn a great salary.

#### How you'll learn

Your learning experiences will include lectures, seminars, laboratory practical exercises, workshop tutorials, fieldwork, and IT sessions. You'll learn from a team of academic staff with extensive experience in industry, and you'll have expert technical staff on hand to support you with your practical and project work.

#### Assessments

You'll be assessed through a range of practical-based methods including coursework, practical exercises and exams. Coursework will make up most of your assessment, consisting of group and individual projects, reports and essays, presentations to your peers, and practical work. You'll receive feedback throughout each module.

#### **Modules**

#### Year One

#### **Civil Engineering Design Projects** 40 credit points

You'll be introduced to the organisation of the construction industry and the key roles played by civil engineering professionals. You'll develop your skills and your knowledge of construction techniques and processes, CAD, health and safety, and sustainability and the environment.

### Engineering Materials

20 credit points

An introduction to the materials encountered in civil engineering and general construction. You'll look at geology, soil mechanics, steel, concrete and organic materials, and develop an understanding of their properties and applications.

## **Engineering Surveying** 20 credit points

You'll be introduced to the basic principles and purposes of engineering surveying. You'll learn how to use standard surveying equipment, how to set out and control construction works, and how to measure existing terrain and features.

# Introduction to Structural Engineering

20 credit points

You'll form a quantitative and qualitative appreciation of structural elements, loadings, and the behaviour and design of beams and triangulated frameworks. This module will also develop your knowledge of statistical analysis.

#### Engineering Mathematics and Mechanics 20 credit points

Learn a comprehensive range of mathematical techniques that underpin many of the analytical parts of civil engineering. This module will provide the foundation for more advanced techniques in Year Two.

#### Year Two

#### Structural Analysis, Design and Detailing 40 credit points

An introduction to the structural behaviour of elements in reinforced concrete and steelwork structures. You'll consider their design and detailing to relevant codes of practice and look at new and emerging technologies in the construction industry.

#### **Construction Practice and the Environment** 20 credit points

Improve your knowledge of industry practice and the roles and responsibilities that you may assume in your placement year and beyond. You'll look at key areas including project organisation, procurement, programming, management, document administration, and health and safety.

#### Integration of Engineering Applications 20 credit points

Study new and emerging technologies within the construction industry. You'll apply your knowledge of engineering surveying, CAD, and BIM. You may work in a project group with students from different years to produce a scheme design related to your study.

#### Further Engineering Mathematics and Fluid Mechanics 20 credit points

Advance your knowledge of relevant engineering mathematics and mechanics. You'll look at probability, calculus, vectors and matrices and fluid mechanics including dimensional analysis, flow through pipes and hydraulic machinery.

#### Ground Engineering

20 credit points

Develop your understanding of fundamental soil and geological properties, and how to measure and test them. You'll test different geological and geotechnical materials, allowing you to recognise and investigate ground-related problems and hazards.

#### Year Three

By choosing our sandwich (four-year) route, you'll be able to undertake a year-long work placement during your studies. These are competitive positions secured through interviews and assessment. Recent placement destinations include VolkerFitzpatrick, nmcn, BAM Nuttall, Aarsleff Ground Engineering and Plowman Craven.

Successful completion of the placement year leads to an extra qualification – the Diploma in Professional Practice.

#### Year Four

#### **Individual with Group project** 40 credit points

An introduction to the structural behaviour of elements in reinforced concrete and steelwork structures. You'll consider their design and detailing to relevant codes of practice and look at new and emerging technologies in the construction industry.

#### **Infrastructure Engineering 1** 20 credit points

Broaden your understanding of the wider urban environment through the introduction of infrastructure topics. You'll study areas including asset management, transport, highways, rail and water, all in the context of sustainable developments. You'll also look at key applications of environmental legislation.

# **Further Structural Design** 20 credit points

Advance your understanding of the design of structural frameworks and assess their stability. You'll have the opportunity to design a structure from the initial stages to completion, using the most common methods of providing robustness to framed structures.

# Further Geotechnical Engineering and Design

20 credit points

You'll learn to analyse typical engineering problems involved in the construction of geotechnical structures. You'll develop informed solutions in line with current design standards and industry approaches.

#### Professional Responsibilities and Development in Civil Engineering 20 credit points

This module is based around four key themes that you'll encounter in industry. These are health, safety and welfare, the profession and wider society, clients, stakeholders and communities and government and sustainability. The aim is to gain a grounding in these areas to prepare you for graduate roles.

#### **Final Year**

#### Major Design and Construction Project 40 credit points

Develop your ability to undertake a design project that is large in scale and / or complex in character. This is a capstone to many of the modules studied throughout the course, especially over the previous academic year. You'll work in a group to produce an ambitious project which will culminate in a final presentation and exhibition of work.

#### Infrastructure Engineering 2 20 credit points

Using standards, codes of practice and design and construction methodologies, you'll review pavements, light rail infrastructure and water and energy systems in analytical detail. These topics will be set within the context of sustainable development and key elements of environmental legislation.

#### Strategic and Operational Management 20 credit points

20 crean points

Understand the complex political, cultural, economic and financial environments in which civil engineering, architectural design and construction organisations operate – at both strategic organisational and individual project levels. You'll explore the civil engineering business environment, project and risk management, and a range of different management philosophies and techniques.

### Digital Design

20 credit points

This module is designed to provide you with experience of using advanced digital design techniques and methodologies to support the architectural and urban design process. You'll develop an understanding of the cross-disciplinary professional relationships, working practices, and areas of responsibility in the architectural profession.

#### Sustainable Concrete Technology 20 credit points

This module will provide you with an appreciation of the rheology of fresh and hardened concrete at an advanced level, the properties of its component materials and how these influence durability and performance. You'll explore the fundamental principles of durable concrete for civil engineering structures, including the micro structure of concrete, admixtures and cement and the hydration process.

#### Your future career

Civil engineering graduates are heavily sought after and often have the chance to work across the world. Recent NTU graduate destinations include Jackson Civil Engineering, AECOM, J Reddington, Winvic Construction and APR Services.

To find out more about this course visit ntu.ac.uk/courses and search for Civil Engineering.



# Construction Management BSc (Hons)

Develop the skills and knowledge needed to succeed in a leadership role in the construction industry. Explore how construction projects are delivered on time, within budget and to the desired quality, focusing on the technical and managerial aspects of the industry.

#### Information

**UCAS code:** K221 (full-time) or K200 (sandwich)

Study mode: Full-time / Sandwich

**Duration:** Three years full-time, four years with a sandwich year or up to five years part-time

#### Entry requirements:

- A-levels CCC; or
- BTEC Extended Diploma MMM; or
- 96 UCAS Tariff points from three A-levels or equivalent qualifications; and
- GCSE English and Maths grade C/4

To apply for the part-time route you'll need to apply direct to the University. Visit **ntu.ac.uk/apply** to submit your application.

100% of our BSc (Hons) Construction Management sandwich students are in graduate level employment within six months of finishing their studies (Destination of Leavers from Higher Education Survey, 2016-17).

Accredited by:

& CIOB

#### About this course

Our professionally accredited course offers a balance of vocational and theoretical content. You'll link the design and construction of buildings, and focus on the technical, professional and managerial aspects of construction projects.

This course places an emphasis on buildings, infrastructure, sustainability, technology, planning and management. You'll develop knowledge of architectural science, building engineering, engineering surveying, contract administration and measurement and cost related to construction projects.

Through working on commercial projects and live briefs set by industry partners, guest lectures from industry experts and work placement opportunities, you'll develop the applied professional competencies and networks that benefit a successful career.

Hands-on learning is embedded in the course content. Working in our modern workshops – home to dedicated concrete, materials and geotechnical laboratories – you'll develop the technical skills required to understand complex construction projects, supported by our expert academic and technical teams.

#### How you'll learn

Your learning experiences will include lectures, seminars, laboratory practical exercises, workshop tutorials, fieldwork, and IT sessions.

#### Assessments

You'll be assessed through a range of practical-based methods including coursework, practical exercises and exams. Coursework will make up most of your assessment, consisting of group and individual projects, reports and essays, presentations to your peers, and practical work. You'll receive feedback throughout each module.

#### Modules

#### Year One

## **Fundamentals of Construction** 40 credit points

An introduction to the domestic construction industry and the technology associated with it. You'll develop an understanding of building materials and their properties, with a focus on modern and sustainable construction.

# Introduction to Measurement and Cost

20 credit points

Develop your understanding of measurement principles and apply your measurement skills. You'll learn how construction costs occur, how to prepare estimates, and how to manage costs throughout the construction process.

#### Architectural Science and Building Engineering Services 20 credit points

You'll be introduced to the basic principles underlying the operation and function of building engineering services. You'll explore sustainability and green buildings, examining factors that include the use of heating, water and energy.

## Numerical and Professional Skills 20 credit points

An in-depth look at the nature of the construction industry, and the key role professionals play in creating the built environment. You'll develop your numeracy skills as a vital part of your professional development.

#### **Construction Industry Practice** 20 credit points

An introduction to the important roles carried out by professionals in the construction industry. You'll explore the structure of the industry, where you'll fit into it, and the tasks you'll undertake.



#### **Construction Technology**

20 credit points

Focusing on industrial and commercial buildings, this module will further your understanding of modern and traditional building technologies. You'll consider sustainable construction methods and materials.

#### Engineering Surveying

20 credit points

You'll be introduced to the basic principles and purposes of engineering surveying. You'll learn how to use standard equipment, how to set out and control construction works, and how to measure existing buildings.

#### Sustainable Technology and Environmental Control 20 credit points

Explore the techniques of sustainability used in building technology and environmental engineering. Learn about using active and passive control methods to manage the internal environments of buildings.

# Contract Administration: Control and Finance

#### 20 credit points

You'll develop an understanding of the construction-related contracts widely used in industry and working practice. You'll study key topics related to the administration of contracts, and you'll apply procedures to industry-related scenarios.

# Construction Management Practice and Procedures

20 credit points

An introduction to the principles and practice of small to mediumsized construction companies. You'll consider their behavioural management systems and the operation of their projects.

#### Law

20 credit points

Discover the English legal system and its relationship with European Union law. You'll learn how law is made, applied and developed, with a focus on construction-related legal topics including health and safety law, contract law, negligence, and occupier's liability.

#### **Year Three**

By choosing our sandwich (four-year) route, you'll be able to undertake a year-long work placement during your studies. These are competitive positions secured through interviews and assessment. Recent placement destinations include Morgan Sindall, Vinci Construction, Mace Group, J N Bentley and Laing O'Rourke.

Successful completion of the placement year leads to an extra qualification – the Diploma in Professional Practice.

#### **Final Year**

#### Dissertation

40 credit points

Through intensive research and knowledge of appropriate theory, you'll develop an extended research project concerning a topic agreed with your dissertation supervisor. Your project can focus on your own interests around a relevant issue in the construction industry.

#### **Construction Management Project** 40 credit points

You'll integrate your knowledge and skills with how they apply to construction management. You'll also explore different techniques required for modern complex construction projects in the UK and internationally. Your coursework will be based around a live construction project, with site visits to showcase the contractors' applications.

#### **Contemporary Construction Themes** 20 credit points

Study current developments within the construction industry, with a focus on technology, sustainability, and procurement. You'll investigate and critically evaluate the related methods and strategies implemented by companies.

#### **Corporate Management** 20 credit points

Advance your understanding of the corporate, financial and operational environment in which construction organisations, their management and their clients all operate.

#### Your future career

Construction management graduates are heavily sought after and often have the chance to work across the world. Recent NTU students have graduated into roles including construction manager, project manager, site engineer, site manager and commercial management trainee, at companies such as Arcadis, VolkerFitzpatrick, JLL, BAM Nuttall and Balfour Beatty.

NTU is ranked second in the UK for Building and Town and Country Planning (Guardian University Guide 2019)

To find out more about this course visit **ntu.ac.uk/courses** and search for Construction Management.



# Quantity Surveying and Commercial Management BSc (Hons)

Quantity surveyors manage the commercial aspects of building and civil engineering projects, including finances, procurement and contracts. Our course will equip you to become a valued member of the construction industry with the capability to deliver high quality projects.

#### Information

**UCAS code:** K4K2 (full-time) or K240 (sandwich)

#### Study mode: Full-time / Sandwich

**Duration:** Three years full-time, four years with a sandwich year or up to five years part-time

#### Entry requirements:

- A-levels BBC; or
- BTEC Extended Diploma DMM; or
- **112 UCAS Tariff points** from three A-levels or equivalent qualifications; and
- **GCSE** English and Maths grade C/4.

To apply for the part-time route you'll need to apply direct to the University. Visit **ntu.ac.uk/apply** to submit your application.

95% of our BSc (Hons) Quantity Surveying and Commercial Management sandwich students are in graduate level employment within six months of finishing their studies (Destination of Leavers from Higher Education Survey, 2016-17).

Accredited by:



#### About this course

This accredited course is for those who want to be at the centre of managing the construction and procurement processes. You'll gain strong financial skills applied to the construction industry, learning the importance of minimising expenses without compromising quality, as well as the ability to negotiate and develop relationships with suppliers.

You'll develop knowledge of cost planning and estimating, law, contract administration, architectural science, building engineering and measurement and cost related to construction projects. Through working on live projects and briefs set by industry partners, guest lectures from industry experts and work placement opportunities, you'll develop the applied professional competencies and networks that benefit a successful career.

#### How you'll learn

Your learning experiences will include lectures, seminars, laboratory practical exercises, workshop tutorials, fieldwork, and IT sessions.

#### Assessments

You'll be assessed through a range of practical-based methods including coursework, practical exercises and exams. Coursework will make up most of your assessment, consisting of group and individual projects, reports and essays, presentations to your peers, and practical work. You'll receive feedback throughout each module.

#### Modules

#### Year One

## **Fundamentals of Construction** 40 credit points

An introduction to the domestic construction industry and the technology associated with it. You'll develop an understanding of building materials and their properties, with a focus on modern and sustainable construction.

#### Introduction to Measurement and Cost

20 credit points

Develop your understanding of measurement principles and apply your measurement skills. You'll learn how construction costs occur, how to prepare estimates, and how to manage costs throughout the construction process.

#### Architectural Science and Building Engineering Services 20 credit points

You'll be introduced to the basic principles underlying the operation and function of building engineering services. You'll explore sustainability and green buildings, examining factors that include the use of heating, water and energy.

#### Numerical and Professional Skills 20 credit points

You'll develop your numeracy skills as a vital part of your professional development and take an in-depth look into the nature of the construction industry, and the key part professionals play in creating the built environment.

# **Construction Industry Practice** 20 credit points

An introduction to the important roles carried out in the construction industry. You'll explore the structure of the industry, where you'll fit into it, and the tasks you'll undertake.

#### Year Two

#### **Construction Technology**

20 credit points

Focusing on industrial and commercial buildings, this module will further your understanding of modern and traditional building technologies. You'll consider sustainability and international construction methods.

#### Sustainable Technology

20 credit points

Explore the techniques of sustainability used in building technology and environmental engineering. Learn about using active and passive control methods to manage the internal environments of buildings.

#### Measurement

20 credit points

The ability to measure quantities is very important and a much soughtafter skill for a quantity surveyor. This module will cover the measurement of building works, building engineering services and civil engineering works.

# Contract Administration: Control and Finance

#### 20 credit points

You'll develop an understanding of the construction-related contracts widely used in industry and working practice. You'll study key topics related to the administration of contracts and apply procedures to industry-related scenarios.

#### Law

20 credit points

Discover the English legal system and its relationship with European Union law. You'll learn how law is made, applied and developed, with a focus on construction-related legal topics including health and safety law, contract law, negligence, and occupier's liability.

## **Cost Planning and Estimating** 20 credit points

Develop your understanding of how construction costs occur, how to estimate costs, and how to manage their occurrence. You'll learn about estimation techniques at the pre-tender stage, and you'll produce residual valuations and cost plans.

#### Year Three

By choosing our sandwich (four-year) route, you'll be able to undertake a year-long work placement during your studies. These are competitive positions secured through interviews and assessment. Recent placement destinations include Arcadis, Balfour Beatty, Turner & Townsend, AECOM and Mace Group.

Successful completion of the placement year leads to an extra qualification – the Diploma in Professional Practice.

#### **Final Year**

#### Dissertation

40 credit points

Through intensive research and knowledge of appropriate theory, you'll develop an extended research project concerning a topic agreed with your dissertation supervisor. Your project can focus on your own interests around a relevant issue in the construction industry.

## **Quantity Surveying Project** 40 credit points

Apply your knowledge and skills to a project scenario. You'll provide an overview of the fundamental principles of the construction development and delivery process. You'll develop your analytical, problem-solving and creative thinking skills, both individually and as part of a team.

#### Contract Practice

20 credit points

You'll develop your existing knowledge of construction contracts and learn to undertake contract practice duties. By drawing on relevant statute, case law and research, you'll gain a rounded understanding of the key issues.

#### **Project and Financial Management** 20 credit points

Further your understanding of the procurement strategies adopted by clients, both in the UK and internationally. You'll develop the ability to interpret the different needs of client groups, and to produce relevant procedural and financial strategies.

#### Your future career

Quantity Surveying and Commercial Management graduates are heavily sought after and often have the chance to work across the world. Recent NTU students have graduated into roles including quantity surveyor, project manager and commercial management trainee, at companies such as VolkerFitzpatrick, VINCI, JLL, BAM Nuttall and Balfour Beatty.

NTU is ranked second in the UK for Building and Town and Country Planning (Guardian University Guide 2019)

To find out more about this course visit ntu.ac.uk/courses and search for Quantity Surveying.

# Product Design BA (Hons)

Product designers innovate the goods and services that enrich our everyday lives. On this course you'll explore the wide-ranging influence of product design thinking and creative methodologies on the product development process.

#### Information

**UCAS code:** W241 (sandwich) or W243 (full-time)

Study mode: Sandwich / full-time

**Duration:** Four years with a sandwich year or three years full-time

#### Entry requirements:

- · A-levels BBC; or
- BTEC Extended Diploma DMM; or
- **112 UCAS Tariff points** from three A-levels or equivalent qualifications; and
- **GCSE** English and Maths grade C/4.

**Other requirements:** You'll be invited to attend an interview, where you'll be required to bring your creative portfolio.

100% of our BA (Hons) Product Design sandwich students are in employment or further study within six months of finishing their studies (Destination of Leavers from Higher Education Survey, 2016-17).

Accredited by:



#### About this course

This is a user-centred course that encourages you to develop your own individual style, vision and philosophy. You'll develop a range of key design communication skills and hone these in practice through live projects, studio work, guest lectures from industry leaders and exciting placement opportunities.

This course places the user at the core of its approach to design process, focusing on the design of products, systems and services that are both functional and sustainable. These include consumer goods, electronic gadgets, sports and healthcare equipment, packaging and transportation. The course content is underpinned with emerging design ideas and contemporary thinking in design and encourages you to explore innovative solutions to real issues in the market.

Through a range of diverse and stimulating projects you'll develop your understanding of the needs of users, markets and manufacturers to innovate, develop and test your designs from the first sketch through to the manufacture of fully functional prototypes. You'll work on a range of live briefs – and competition work – with real industry clients such as Nestlé, PepsiCo, Speedo, Instrmnt, Herman Miller, Matter Design and W'Innovate to develop your design capabilities and commercial awareness.

#### How you'll learn

Your learning experiences will include lectures, seminars, tutorials, workshops and studio design sessions. You'll be supported by our team of teaching staff with vast experience in industry and our technical teams whose expertise ranges from physical model making and digital prototyping through to CAD and electronics.

#### Assessments

Your assessment will be 100% coursework. This will consist of projects, reports, presentations, essays and a portfolio.

#### Modules

#### Year One

#### **Design Fundamentals** 40 credit points

This module provides the fundamental skills and knowledge you need as a design professional. You'll undertake a number of exciting product-inspired design projects and develop your awareness of a range of material properties and production processes. You'll learn how to communicate your ideas through a range of techniques including CAD, sketching, modelling, presentation drawings, images, and rendering.

#### **The Developing Product Designer** 40 credit points

You'll build on the areas introduced in the Design Fundamentals module, continuing to work on studio-based activities. You'll explore the importance of commercial context in design and develop an understanding of contemporary issues that influence culture and society and their relationship with design. You'll broaden your portfolio by undertaking a range of projects individually and as part of a team.

## **Applied Product Design Practice** 40 credit points

This module focuses on context and identity of design, and how to incorporate this knowledge into your projects. You'll consider your own position as a future designer and develop your own identity in the field through your design communication skills and project work. You'll explore services, systems design and digital prototyping, and how to apply these in practice.



#### **Professional Practice**

60 credit points

This module is designed to prepare you – as a designer – for industry. You'll focus on developing your portfolio and design communication skills with a view to placement and graduate jobs. You'll improve your awareness and understanding of the commercial aspects of design through working on industry-based projects. These projects will provide experience in dealing with live briefs, clients, and commercial needs, while developing your knowledge of issues related to design for manufacture, homeware design and entrepreneurship.

# Product Design: Context and Identity 60 credit points

This module focuses on a series of product design projects, for which you'll work on live briefs, some with industry clients, to real time deadlines. Your work will creatively consider the global context of product design and contemporary design practice, exploring sustainability, cultural challenges, resources and material usage. You'll recognise the significant issues designers face in practice such as user-centred design, ergonomics, digital design, and changing commercial markets.

#### **Year Three**

By choosing our sandwich (four-year) route, you'll be able to undertake a year-long work placement during your studies. These are competitive positions secured through interviews and assessment. Recent placement destinations include Disney, Hasbro, Roundhouse Design, Tesco and Philip Watts Design.

Successful completion of the placement year leads to an extra qualification – the Diploma in Professional Practice.

During Year Three, you'll also have the opportunity to undertake a European Project Semester, which you can spend studying at one of our partner institutions.

#### **Final Year**

#### Design in Practice

80 credit points

Within this module you'll complete two significant design projects. These projects will require you to explore, model, research, propose and develop ideas, concepts and products. This is your opportunity to apply your skills, knowledge and understanding of design methodologies and express your creativity in practice through the realisation of products. Your work can be in the form of commercial projects in collaboration with an industry partner, or individual pieces of work.

#### Design in Context

40 credit points

This module gives you the opportunity to explore a subject of your personal interest and choice. You'll either do this through a dissertation – a critically reflective piece of work independent from the rest of your studies – or as a thesis – a critically reflective piece directly linked to your self-directed project in the Design in Practice module. Whichever route you choose, your topics are individually negotiated and agreed with tutors through a learning agreement.

#### Exhibiting

In your final year, you'll showcase your work to the creative industries at the NTU Art and Design Degree Show. You'll also have the opportunity to exhibit at other industry-attended events, both in Nottingham and elsewhere. These include New Designers in London and various other smaller-scale exhibitions.

#### Trips and study visits

A range of national and international study trips are included in your course fees. They're essential for developing your understanding of different perspectives in design. Students recently visited Berlin, exploring the Bauhaus Museum of Design, and Valencia, where they visited the Lavernia Cienfuegos design studio.

#### Your future career

Our students have graduated into roles including product designers, design specialists, design engineers, CAD designers and visualisation managers at companies such as Sony, Mothercare, Sainsbury's Argos, Nestlé and LEGO.

To find out more about this course visit ntu.ac.uk/courses and search for Product.



# **Furniture and Product Design** BA (Hons)

Furniture and product designers produce innovative items for the consumer market, from commercial and domestic furnishings to interiors and household goods.

#### Information

UCAS code: W240 (sandwich) or W242 (full-time)

Study mode: Sandwich / full-time

**Duration:** Four years with a sandwich year or three years full-time

#### Entry requirements:

- · A-levels BBC; or
- BTEC Extended Diploma DMM; or
- **112 UCAS Tariff points** from three A-levels or equivalent qualifications; and
- GCSE English and Maths grade C/4.

**Other requirements:** You'll be invited to attend an interview, where you'll be required to bring your creative portfolio.

100% of our BA (Hons) Furniture and Product Design sandwich students are in graduate level employment within six months of finishing their studies (Destination of Leavers from Higher Education Survey, 2016-17).

Accredited by:



#### About this course

This course will develop you as a creative practitioner and help you to identify and develop your own individual style, vision and philosophy. You'll have the freedom and resource to develop your concepts and creative practice and – through live projects, studio work, guest lectures from industry leaders and exciting placement opportunities – learn the principles of effective design.

Your efforts will focus on making. Throughout the course you'll constantly be developing your professional portfolio and adding to it through work on a diverse range of design projects and the acquisition of new skills.

You'll develop the core design communication skills needed to succeed in industry, through a range of techniques including sketching, model making and CAD. You'll learn to express your creative and technical talents in practice and develop your commercial awareness working with real industry clients such as John Lewis, Umbra, Isokon, QFC, Morgan Contract Furniture and DFS on a diverse range of live projects and briefs.

#### How you'll learn

The main points of contact throughout your studies include lectures, seminars, tutorials, workshops and studio design sessions. You'll be supported by our team of teaching staff with vast experience in industry and our expert team of technical professionals.

#### Assessments

Your assessment will be 100% coursework. This will consist of projects, reports, presentations, essays and a portfolio.

#### Modules

#### Year One

### **Design Fundamentals** 40 credit points

This module provides the fundamental skills and knowledge you need as a design professional. You'll undertake a number of exciting product-inspired design projects and develop your awareness of a range of material properties and production processes. You'll learn how to communicate your ideas through a range of techniques including CAD, sketching, modelling, presentation drawings, images, and rendering.

# The Developing Furniture and Product Designer

40 credit points

You'll build on the areas introduced in the Design Fundamentals module, continuing the practical design culture through studio-based activities and lectures. You'll explore the importance of commercial context in design, and develop an understanding of contemporary issues that influence culture and society and their relationship with design. You'll broaden your portfolio by undertaking a range of projects individually and as part of a team.

#### Applied Furniture and Product Design Practice 40 credit points

This module focuses on context and identity of design, and how to incorporate this knowledge into your projects. You'll consider your own position as a future designer and develop your own identity in the field through your design communication skills and project work. You'll explore services, systems design and digital prototyping, and how to apply these in practice.



#### Professional Practice

60 credit point

This module is designed to prepare you – as a designer – for industry. You'll focus on developing your portfolio and design communication skills with a view to placement and graduate jobs. You'll improve your awareness and understanding of the commercial aspects of design through working on industry-based projects. These projects will provide experience in dealing with live briefs, clients, and commercial needs, while developing your knowledge of issues related to design for manufacture, homeware design and entrepreneurship.

#### Furniture and Product Design: Context and Identity 60 credit points

This module focuses on a series of design projects. You'll work on live briefs, some with industry clients, to real time deadlines. Your work will creatively consider the global context of furniture and product design and contemporary design practice, exploring sustainability, cultural challenges, resources and material usage. You'll recognise the significant issues designers face in practice such as user centred design, ergonomics, digital design, and changing commercial markets.

#### **Year Three**

By choosing our sandwich (four-year) route, you'll be able to undertake a year-long work placement during your studies. These are competitive positions secured through interviews and assessment. Recent placement destinations include Disney, Hasbro, Roundhouse Design, Tesco and Philip Watts Design.

Successful completion of the placement year leads to an extra qualification – the Diploma in Professional Practice.

During Year Three, you'll also have the opportunity to undertake a European Project Semester, which you can spend studying at one of our partner institutions.

#### **Final Year**

#### Design in Practice

80 credit point

Within this module you'll complete two significant design projects. These projects will require you to explore, model, research, propose and develop ideas, concepts and products. This is your opportunity to apply your skills, knowledge and understanding of design methodologies and express your creativity in practice through the realisation of products. Your work can be in the form of commercial projects in collaboration with an industry partner, or individual pieces of work.

#### Design in Context

40 credit point

This module gives you the opportunity to explore a subject of your personal interest and choice. You'll either do this through a dissertation – a critically reflective piece of work independent from the rest of your studies – or as a thesis – a critically reflective piece directly linked to your self-directed project in the Design in Practice module. Whichever route you choose, your topics are individually negotiated and agreed with tutors through a learning agreement.

#### Exhibiting

In your final year, you'll showcase your work to the creative industries at the NTU Art and Design Degree Show. You'll also have the opportunity to exhibit at other industry-attended events, both in Nottingham and elsewhere. These include New Designers in London and various other smaller-scale exhibitions.

#### Trips and study visits

A range of national and international study trips are included in your course fees. They're essential for developing your understanding of different perspectives in design. Students recently visited the Mainson&Objet design fair in Paris and the Vitra Design Museum in Mullhouse.

#### Your future career

Our students have graduated into roles including product designers, design specialists, design engineers, CAD designers and visualisation managers at companies such as John Lewis, G-Plan, Benchmark, Nestlé, FBC London, Object Design, DFS and Kitchen Architecture.

To find out more about this course visit ntu.ac.uk/courses and search for Furniture.



# Product Design BSc (Hons)

Product designers, engineers and technologists solve real-world problems with their analytical ability and inquisitive nature. You'll learn to understand the underlying technology of product design and learn how you can make your designs work in practice.

#### Information

**UCAS code:** H715 (sandwich) or W244 (full-time)

Study mode: Full-time / Sandwich

**Duration:** Four years with a sandwich year or three years full-time

#### Entry requirements:

- A-levels BBC; or
- BTEC Extended Diploma DMM; or
- **112 UCAS Tariff points** from three A-levels or equivalent qualifications; and
- **GCSE** English and Maths grade C/4.

100% of our BSc (Hons) Product Design sandwich students are in graduate level employment within six months of finishing their studies (Destination of Leavers from Higher Education Survey, 2016-17).

#### Accredited by:



#### About this course

This course focuses on the design of products for manufacturing, digital, industrial, electronics and medical applications, placing technology and scientific advancement at the core of the design process. You'll be given the freedom and resource to develop your own creative practice and – through live projects, studio work, guest lectures from industry leaders and exciting placement opportunities – develop your professional portfolio.

You'll be challenged to push the boundaries in design to understand the contemporary issues that influence culture and society, and their relationship with design. You'll develop your knowledge of materials and explore new and emerging technologies, including programming and electronics.

Through commercial projects with industry you'll develop innovative solutions to briefs, by reflecting, modelling, testing, modifying, developing, and improving your ideas. You'll work on a range of live briefs – and competition work – with real industry clients such as PepsiCo, SAPA, McGee and W'Innovate to develop your design capabilities and commercial awareness.

#### How you'll learn

The main points of contact throughout your studies include lectures, seminars, tutorials, workshops, and studio design sessions. You'll be supported by our team of teaching staff with vast experience in industry and our technical teams whose expertise ranges from physical model making and digital prototyping through to CAD and electronics.

#### Assessments

Your assessment will be 100% coursework. This will consist of projects, reports, presentations, essays and a portfolio.

#### Modules

#### Year One

### **Design Fundamentals** 40 credit points

This module provides the fundamental skills and knowledge you need as a design professional and technologist. You'll undertake a number of exciting product-inspired design projects and develop your awareness of a range of material properties and production processes. You'll learn how to communicate your ideas through a range of techniques including CAD, sketching, modelling, presentation drawings, images and rendering.

#### **The Developing Design Technologist** 40 credit points

You'll build on the areas introduced in the Design Fundamentals module, continuing the practical design culture through studio-based activities and lectures. You'll enhance your knowledge and skills in design communications through digital tools including 3D CAD modelling and sketch modelling as well as developing your skills in presenting, through presentations to your tutors and peers. You'll broaden your portfolio by undertaking a range of projects, individually and as part of a team.

#### **Applied Design Technology** 40 credit points

This module will focus specifically on technology and its application in design, contextualising product design under technical perspectives. You'll be introduced to the basic principles and applications of technology and understand how they affect the development of products and systems. You'll further your understanding of machinery relative to resistant materials and production, electronics, electrical systems, and pneumatics.



#### Professional Practice

60 credit points

This module is designed to prepare you – as a designer – for industry. You'll focus on developing your portfolio and design communication skills with a view to placement and graduate jobs. You'll improve your awareness and understanding of the commercial aspects of design through working on industry-based projects. These projects will provide experience in dealing with live briefs, clients, and commercial needs, while developing your knowledge of issues related to design for manufacture, materials and entrepreneurship.

#### Applied Materials and Technology 60 credit points

You'll develop the knowledge, skills and attributes learnt in the first year of your studies, to give you confidence to progress as a product designer or technologist. You'll work on design briefs related to global perspectives and sustainability and realise the full format of a designer's outputs, including technical reports and drawings, CAD work, renderings, prototypes and simulations, to an industrial and commercially accepted standard. Your work will be underpinned by a knowledge of theoretical and practical insights, including electrical and electronic systems, mechanical systems, robotics, and programming.

#### Year Three

By choosing our sandwich (four-year) route, you'll be able to undertake a year-long work placement during your studies. These are competitive positions secured through interviews and assessment. Recent placement destinations include Triumph, Diversey, Solid Solutions, Games Workshop and HJC Design.

Successful completion of the placement year leads to an extra qualification – the Diploma in Professional Practice.

#### **Final Year**

#### **Design in Practice** 80 credit points

Within this module you'll complete two significant design projects. These projects will require you to explore, model, research, propose and develop ideas, concepts and products. This is your opportunity to apply your skills, knowledge and understanding of design methodologies and express your creativity in practice through the realisation of products. Your work can be in the form of commercial projects in collaboration with an industry partner, or individual pieces of work.

#### Design in Context

40 credit points

This module gives you the opportunity to explore a subject of your personal interest and choice. You'll either do this through a dissertation – a critically reflective piece of work independent from the rest of your studies – or as a thesis – a critically reflective piece directly linked to your self-directed project in the Design in Practice module. Whichever route you choose, your topics are individually negotiated and agreed with tutors through a learning agreement.

#### Exhibiting

In your final year, you'll showcase your work to the creative industries at the NTU Art & Design Degree Show. You'll also have the opportunity to exhibit at other industry-attended events, both in Nottingham and elsewhere. These include New Designers in London and various other smaller-scale exhibitions.

#### Trips and study visits

A range of national and international study trips are included in your course fees. They're essential for developing your understanding of different perspectives in design. Students recently visited Rotterdam and collaborated with their counterparts from the Rotterdam University of Applied Sciences on project work.

#### Your future career

Our students have graduated into roles including product designers, design specialists, design engineers, CAD designers and visualisation managers at companies such as Dyson, TATA and Cummins.

To find out more about this course visit ntu.ac.uk/courses and search for Product.



# Building Surveying BSc (Hons)

Building surveyors provide advice on property and construction projects, identifying defects and advising on maintenance and repair. They work on the development of new buildings and the restoration of existing properties across residential, commercial, industrial, leisure and heritage projects.

#### Information

**UCAS code:** K231 (full-time) or K230 (sandwich)

Study mode: Full-time / Sandwich

**Duration:** Three years full-time or four years with a sandwich year

#### Entry requirements:

- A-levels BBB; or
- BTEC Extended Diploma DDM; or
- **120 UCAS Tariff points** from three A-levels or equivalent qualifications; and
- GCSE English and Maths grade C/4.

94% of our BSc (Hons) Building Surveying sandwich students are in employment or further study within six months of finishing their studies (Destination of Leavers from Higher Education Survey, 2016-17).

Accredited by:







#### About this course

Our triple-accredited course will provide you with the detailed specialist knowledge and skills to advise on relevant processes. You'll develop a detailed understanding of architectural styles and influences, the history of buildings and building techniques, the evaluation of building elements, and the performance of building materials.

You'll learn to test and analyse all aspects of building performance, and to advise on alternative uses of existing buildings. You'll also discover how to supervise remediation and refurbishment projects, and how to apply health and safety regulations.

You'll experience live projects with real clients such as Faithful +Gould and Gleeds, guest lectures from visiting industry experts, a European study trip and exciting placement opportunities. These opportunities work in conjunction with your studies, so you'll be able to use the content of the projects and lectures to complete coursework. Meeting and networking with these industry contacts, and discussing real issues in industry, will also help you develop your knowledge and further your career.

#### How you'll learn

Your learning experiences will include lectures, seminars, tutorials, fieldwork and site visits, and selfdirected project work. You'll learn from a team of academic staff with extensive experience and vast working knowledge of today's property and construction industries.

#### Assessments

You'll be assessed through coursework, practical exercises and exams. Coursework will make up most of your assessment, consisting of group and individual projects, reports, presentations to your peers, and essays.

#### Modules

#### Year One

Professional, Academic and Business Skills 20 credit points

An introduction to academic study and the built environment. You'll learn about the range of professions within the industry and the nature of the work carried out by surveyors.

#### Surveying Skills

20 credit points

This module will lay the groundwork for your development in the practice of surveying. You'll be introduced to different methods and techniques used in industry.

#### Construction

20 credit points

Learn about the broad range of technical, practical and environmental principles involved in the construction of buildings. This will provide a framework for your understanding of the environmental impact of buildings, and the concepts of building pathology and construction technology.

## **Economics and Valuation** 20 credit points

An introduction to property economics, valuation, and the links between the economy and the property market. You'll apply the theory of supply and demand to explain different activity in the property and construction markets.

#### Law

20 credit points Discover the English legal system and its relationship with European Union law. You'll gain an understanding of how law is made, applied and developed and study its impact on activities in the development and property professions.



## Planning and Land Use 20 credit points

Learn about the principles of the planning system in a module underpinned by the concepts of sustainable development. You'll also consider the impact of climate change on how cities will evolve and adapt in the future.

#### Year Two

#### Structural Appraisal

20 credit points

Develop your knowledge of the performance of buildings and their component parts. You'll gain an understanding of the modes of failure and different construction materials. You'll also be introduced to basic structural design, disrepair, and methods of remediation.

# Contract Administration and Procurement

20 credit points

Analyse the procurement process involved in building projects. You'll focus on the process of appointing consultants and contractors for minor and major projects, as well as administering contracts.

# Property Development: Principles and Practice

20 credit points

An introduction to the development process and the commercial drivers behind it. You'll learn to examine the roles of various participants in the process and how they affect its end product.

#### Employability and Commercial Awareness

#### 20 credit points

Designed to prepare you for employment in the property sector, you'll be introduced to the requirements for the Royal Institution of Chartered Surveyors (RICS) Assessment of Professional Competence (APC). You'll learn about the principles of employment law, health and safety at work regulations, and related procedures.

#### **Building Design Project** 40 credit points

This studio-based module will allow you to explore the vast range of options in the selection of building materials, construction methods and environmental services. You'll also develop the surveying proficiencies required for land and building projects.

#### **Year Three**

By choosing our sandwich (four-year) route, you'll be able to undertake a year-long work placement during your studies. These are competitive positions secured through interviews and assessment. Recent placement destinations include Baily Garner, Mitchells & Butlers, Paragon, Innes England and Nottingham City Homes.

Successful completion of the placement year leads to an extra qualification – the Diploma in Professional Practice.

#### **Final Year**

# **Building Surveying Practice** 40 credit points

Further develop your knowledge of the performance of buildings and their component parts, focusing on best practice in building management and maintenance. You'll be taught how to identify and diagnose complex defects in existing buildings and learn to develop schedules of planned works.

#### Building Pathology

40 credit points

Learn to diagnose, assess and classify defects in all types of buildings, and to apply your knowledge to practical situations. You'll also learn to specify the appropriate methods of dealing with hidden defects, sensitive locations, party walls, and dilapidation issues.

#### Heritage and Conservation 20 credit points

Broaden your knowledge of architectural history and conservation, and of heritage philosophy and practice. You'll learn to identify different architectural styles, appraise culturally significant buildings, and manage proposed uses in line with current practice.

#### **Research Project**

20 credit points

Investigate a topic of your choice in an extended research project. You'll critically analyse existing literature, recommend and apply suitable research methods, analyse data, and produce conclusions and recommendations.

#### OR

In place of the Research Project module you can study:

#### Professional Development and Research Project 20 credit points

You'll undertake an applied research project based on relevant work experience gained prior to your final year. You'll critically analyse existing literature and produce conclusions and recommendations for your chosen case study.

#### Your future career

Our graduates have gone on to work in senior positions in national and international companies including EC Harris LLP (Arcadis), Savills, Croudace Homes, Cubit Consulting, CBRE and NG Chartered Surveyors.

To find out more about this course visit ntu.ac.uk/courses and search for Building Surveying.



# Property Development and Planning BSc (Hons)

Property development and planning is fundamental to the growth of the property industry – from scheme proposal, site identification and analysis, through to design, viability, finance and marketing.

#### Information

**UCAS code:** K420 (full-time) or K491 (sandwich)

Study mode: Full-time / Sandwich

**Duration:** Three years full-time or four years with a sandwich year

#### Entry requirements:

- · A-levels BBB; or
- BTEC Extended Diploma DDM; or
- **120 UCAS Tariff points** from three A-levels or equivalent qualifications; and
- GCSE English and Maths grade C/4.

We're ranked 4th in the UK for Land and Property Management courses (The Times and Sunday Times Good University Guide, 2019).

Accredited by:



#### About this course

Our professionally accredited course will develop your specialist knowledge and skills in property. You'll gain a comprehensive understanding of areas including spatial and urban design, site appraisal, sustainability, planning and development consultancy, and management of the development process.

You'll develop core surveying skills in areas crucial to the success of your graduate career. Alongside more specialist and technical knowledge, you'll focus on business planning, client care, communication and negotiation.

If you're thinking of entering the dynamic property industry, a degree specialising in development and planning is an excellent starting point. You'll experience live projects with real clients such as JLL, Rolls-Royce and Igloo, guest lectures from visiting industry experts, a European study trip and exciting placement opportunities. Meeting and networking with these industry contacts, and discussing real issues in industry, will help you develop your knowledge and further your career.

#### How you'll learn

Your learning experiences will include lectures, seminars, tutorials, fieldwork and site visits, and selfdirected project work. You'll learn from a team of academic staff with extensive experience and vast working knowledge of industry.

#### Assessments

You'll be assessed through coursework, practical exercises and exams. Coursework will make up most of your assessment, including of group and individual projects, reports, essays and presentations.

#### Modules

#### **Year One**

# Professional, Academic and Business Skills

20 credit points

An introduction to academic study and the built environment. You'll learn about the range of professions within the industry and the nature of the work carried out by surveyors and coprofessionals.

#### Surveying Skills

20 credit points

This module will lay the groundwork for your development in practice and surveying. You'll be introduced to different methods and techniques used in industry.

#### Construction

20 credit points

Learn about the broad range of technical, practical and environmental principles involved in the construction of buildings. This will provide a framework for your understanding of the environmental impact of buildings, and the concept of building pathology.

### **Economics and Valuation** 20 credit points

An introduction

An introduction to property economics, valuation, and the links between the economy and the property market. You'll apply the theory of supply and demand to explain different activity in the property and construction markets.

#### Law

20 credit points

Discover the English legal system and its relationship with European Union law. You'll gain an understanding of how law is made, applied and developed and study its impact on activities in the development and property professions.

### Planning and Land Use 20 credit points

Learn about the principles of the planning system in a module underpinned by the concepts of sustainable development. You'll also consider the impact of climate change on how cities will evolve and adapt in the future.

#### Year Two

#### Valuation

20 credit points

Develop your knowledge and understanding of the different approaches to property valuation. You'll examine the application of different techniques involved in the valuation process.

#### **Concepts and Practice in Planning** 20 credit points

Apply your knowledge of planning principles to practice and develop an integrated understanding of the processes involved. You'll explore connections between relevant areas and recognise the political framework for decision making, including the roles of private stakeholders and the public.

#### Property Management and Agency 40 credit points

An introduction to the principles, procedures and practices of commercial estate management, property agency, and landlord and tenant law. You'll develop an awareness of interrelationships within the industry and the application of marketing.

#### Property Development: Principles and Practice

20 credit points

Learn about the development process and the commercial drivers behind it. You'll examine the roles of various participants in the development process, and how they affect its end product.

#### Employability and Commercial Awareness

20 credit points

Designed to prepare you for employment in the property sector, you'll be introduced to the requirements for the RICS APC. You'll learn about the principles of employment law, health and safety at work regulations, and related procedures.

#### Year Three

By choosing our sandwich (four-year) route, you'll be able to undertake a year-long work placement during your studies. These are competitive positions secured through interviews and assessment. Recent placement destinations include Lambert Smith Hampton, Barker Storey Matthews, Gleeds, Mitchells & Butlers and Jaguar Land Rover.

Successful completion of the placement year leads to an extra qualification – the Diploma in Professional Practice.

#### **Final Year**

#### **Development Consultancy** 60 credit points

Apply your planning and development skills to a range of practical projects. Designed to mirror industry processes, the projects will allow you to exhibit the knowledge you've developed throughout the course. You'll study everything from land search and purchase, to design and infrastructure, to development appraisal, finance, and marketing.

#### Planning Consultancy

40 credit points

You'll undertake a planning appraisal, prepare planning applications, seek to secure consent for development proposals, and present to real clients. This project and feedback you'll receive on it will prepare you for the consultancy-related tasks you'll perform in industry.

### **Research Project** 20 credit points

Investigate a topic of your choice in an extended research project. Critically analyse existing literature, recommend and apply suitable research methods, analyse data, and produce conclusions and recommendations.

OR

In place of the Research Project module you can study:

#### Professional Development and Research Project 20 credit points

You'll undertake an applied research project based on relevant work experience gained prior to your final year. You'll critically analyse existing literature and produce conclusions and recommendations for your chosen case study.

#### Your future career

Our students have graduated into roles such as land acquisition surveyor and graduate surveyor in companies including Berkeley Group, Barratt Homes, Croudace Homes, Innes England and Savills.

To find out more about this course visit ntu.ac.uk/courses and search for Property Development.

# Real Estate BSc (Hons)

The property industry is a dynamic field that reacts to macroeconomic trends like interest rates, population growth, and economic strength. There is a constant demand for graduates with skills in management, planning, investment and negotiation.

#### Information

UCAS code: N232 (full-time) or N234 (sandwich)

Study mode: Full-time / Sandwich

Duration: Three years full-time or four years with a sandwich year

#### Entry requirements:

- A-levels BBB: or
- BTEC Extended Diploma DDM; or
- 120 UCAS Tariff points from three A-levels or equivalent qualifications; and
- GCSE English and Maths grade C/4.

100% of our BSc (Hons) Real Estate sandwich students are in graduate level employment within six months of finishing their studies (Destination of Leavers from Higher Education Survey, 2016-17).

Accredited by:



#### About this course

This course will introduce you to all aspects of property management, including valuation, development, sustainability, and financing projects.

Throughout the course, you'll develop your skills in areas including business planning and project management and learn the relationships between - and the demands of - occupiers, developers, investors and funders. You'll comprehensively examine real estate - from development, investment and management, through to the sale and acquisition.

You'll benefit from live practical projects and site visits with companies such as Savills, JLL and Sainsbury's, guest lectures from visiting industry experts, a European study trip and exciting placement opportunities. Meeting and networking with these industry contacts and discussing real issues in industry will help you develop your knowledge and further your career which could take you across the world.

#### How you'll learn

Your learning experiences will include lectures, seminars, tutorials, fieldwork and site visits, and self-directed project work. You'll learn from a team of research-active academic staff with extensive industry experience and vast working knowledge of today's property markets.

#### Assessments

You'll be assessed through coursework, practical exercises and exams. Coursework will make up most of your assessment, consisting of group and individual projects, reports, presentations to your peers, and essays.

#### **Modules**

#### Year One

Professional, Academic and **Business Skills** 20 credit points

An introduction to academic study and the built environment. You'll learn about the range of professions within the industry and the nature of the work carried out by surveyors and coprofessionals.

#### Surveying Skills

20 credit points

This module will lay the groundwork for your development in practice and surveying. You'll be introduced to different methods and techniques used in industry.

#### Construction

20 credit points

Learn about the broad range of technical, practical and environmental principles involved in the construction of traditional and non-traditional buildings. This will provide a framework for your understanding of the environmental impact of buildings, and the concept of building pathology.

### **Economics and Valuation**

20 credit points

An introduction to property economics, valuation, and the links between the economy and the property market. You'll apply the theory of supply and demand to explain different activity in the property and construction markets.

#### Law

20 credit points

Discover the English legal system and its relationship with European Union law. You'll gain an understanding of how law is made, applied and developed and study its impact on activities in the development and property professions.

#### Planning and Land Use

20 credit points

Learn about the principles of the planning system in a module underpinned by the concepts of sustainable development. You'll also consider the impact of climate change on how cities will evolve and adapt in the future.

#### Year Two

#### Valuation

20 credit points

Develop your knowledge and understanding of the different approaches to property valuation. You'll examine the application of different techniques involved in the valuation process.

#### **Real Estate Economics**

20 credit points

Develop your understanding of the relationship between the economy and the real estate industry. You'll use economic models to understand market behaviour and look at various property types.

## **Property Management and Agency** 40 credit points

An introduction to the principles, procedures and practices of commercial estate management, property agency, and landlord and tenant law. You'll develop an awareness of interrelationships within the industry and the application of marketing.

#### Property Development: Principles and Practice 20 credit points

Learn about the development process and the commercial drivers behind it. You'll examine the roles of various participants in the development process and how they affect its end product.

#### Employability and Commercial Awareness 20 credit points

Designed to prepare you for employment in the property sector, you'll be introduced to the requirements for the RICS APC. You'll learn about the principles of employment law, health and safety at work regulations and related procedures.

#### Year Three

By choosing our sandwich (four-year) route, you'll be able to undertake a year-long work placement during your studies. These are competitive positions secured through interviews and assessment. Recent placement destinations include Gerald Eve LLP, Faithful+Gould, Lambert Smith Hampton, Savills, and Barker Storey Matthews.

Successful completion of the placement year leads to an extra qualification – the Diploma in Professional Practice.

#### **Final Year**

#### **Portfolio and Fund Management** 40 credit points

Develop an understanding of the principles of portfolio management theory and practice, and how they are applied in property investment. You'll learn how portfolios are constructed and managed, and various techniques for applying your knowledge.

## **Corporate Real Estate** 40 credit points

The strategic movement of real estate

is of vital importance to businesses in the property industry. You'll gain a broad understanding of how best to manage corporate real estate assets to maximise a company's return.

#### **Investment Appraisal and Valuation** 20 credit points

Develop a detailed and critical understanding of principles, techniques, and practices relating to the appraisal and valuation of capital investments, with an emphasis on real estate investments. You'll develop the skills needed to produce investment and market valuations and appraise real estate investment performance at single asset and portfolio levels.

#### **Research Project**

20 credit points

Investigate a topic of your choice in an extended research project. Critically analyse existing literature, recommend and apply suitable research methods, analyse data, and produce conclusions and recommendations.

#### OR

In place of the Research Project module you can study:

#### Professional Development and Research Project 20 credit points

You'll undertake an applied research project based on relevant work experience gained prior to your final year. You'll critically analyse existing literature and produce conclusions and recommendations for your chosen case study.

#### Your future career

Our students have graduated into roles such as land acquisition surveyor and graduate surveyor in companies including Knight Frank LLP, Cushman & Wakefield, AXA, CBRE and Colliers

To find out more about this course visit ntu.ac.uk/courses and search for Real Estate.

# **Property Finance and Investment** BSc (Hons)

The property industry has a growing need for financially-literate graduates with specialist investment and finance knowledge. Graduates in this field are some of the highest paid, thanks to the growing relationship between the property, investment and financial markets.

#### Information

**UCAS code:** N3N5 (full-time) or NN23 (sandwich)

Study mode: Full-time / Sandwich

**Duration:** Three years full-time or four years with a sandwich year

#### Entry requirements:

- · A-levels BBB; or
- BTEC Extended Diploma DDM; or
- **120 UCAS Tariff points** from three A-levels or equivalent qualifications; and
- **GCSE** English and Maths grade C/4.

We're ranked 4th in the UK for Land and Property Management courses (The Times and Sunday Times Good University Guide, 2019).

Accredited by:



#### About this course

Our professionally accredited course has been developed for the property industry's demands, designed to provide you with detailed and specialist knowledge required in industry. You'll develop core property industry skills in areas including investment and financial project management, financial risk management, negotiation, real estate investment, valuation, portfolio management, investment appraisal and financial regulations.

Delivered by industry-experienced and research-active academics, the course has an interdisciplinary approach, linking finance and economics to address global issues related to investment, financial management and real estate. You'll learn to discover market behaviours and analyse and evaluate patterns related to real estate economics and funding.

You'll benefit from live practical projects with companies such as JLL, Rolls-Royce and Savills, guest lectures from visiting industry experts, a European study trip and exciting placement opportunities. Meeting and networking with these industry contacts, and discussing real issues in industry, will help you develop your knowledge and further your career which could take you across the world.

#### How you'll learn

Your learning experiences will include lectures, seminars, tutorials, fieldwork and site visits, and selfdirected project work. You'll learn from a team of academic staff with extensive experience and vast working knowledge of today's property investment industry.

#### Assessments

You'll be assessed through coursework, practical exercises and exams. Coursework will consist of your assessment, consisting of group and individual projects, reports, presentations to your peers, and essays.

#### Modules

#### **Year One**

#### Professional, Academic and Business Skills 20 credit points

An introduction to academic study and the built environment. You'll learn about the range of professions within the industry and the nature of the work carried out by surveyors and coprofessionals.

#### Surveying Skills

20 credit points

This module will lay the groundwork for your development in practice and surveying. You'll be introduced to different methods and techniques used in industry.

#### Construction

20 credit points

Learn about the broad range of technical, practical and environmental principles involved in the construction of buildings. This will provide a framework for your understanding of the environmental impact of buildings, and the concept of building pathology.

## **Economics and Valuation** 20 credit points

An introduction to property economics, valuation, and the links between the economy and the property market. You'll apply the theory of supply and demand to explain different activity in the property and construction markets.



#### Law

20 credit points

Discover the English legal system and its relationship with European Union law. You'll gain an understanding of how law is made, applied and developed and study its impact on activities in the development and property professions.

### Planning and Land Use

20 credit points

Learn about the principles of the planning system in a module underpinned by the concepts of sustainable development. You'll also consider the impact of climate change on how cities will evolve and adapt in the future.

#### Year Two

#### Valuation

20 credit points

Develop your knowledge and understanding of the different approaches to property valuation. You'll examine the application of different techniques involved in the valuation process.

#### Real Estate Economics

20 credit points

Develop your understanding of the relationship between the economy and the real estate industry. You'll use economic models to understand market behaviour and look at various property types.

## **Property Management and Agency** 40 credit points

An introduction to the principles, procedures and practices of commercial estate management, property agency, and landlord and tenant law. You'll develop an awareness of interrelationships within the industry and the application of marketing.

# Property Development: Principles and Practice

20 credit points

Learn about the development process and the commercial drivers behind it. You'll examine the roles of various participants in the development process and how they affect its end product.

#### Employability and Commercial Awareness 20 credit points

Designed to prepare you for employment in the property sector, you'll be introduced to the requirements for the RICS APC. You'll learn about the principles of employment law, health and safety at work regulations and related procedures.

#### Year Three

By choosing our sandwich (four-year) route, you'll be able to undertake a year-long work placement during your studies. These are competitive positions secured through interviews and assessment. Recent placement destinations include Gerald Eve LLP, Lambert Smith Hampton, Savills, Baily Garner and Cushman & Wakefield.

Successful completion of the placement year leads to an extra qualification – the Diploma in Professional Practice.

#### **Final Year**

#### **Portfolio and Fund Management** 40 credit points

Develop an understanding of the principles of portfolio management theory and practice, and how they are applied in property investment. You'll learn how portfolios are constructed and managed, and various techniques for applying your knowledge.

# **Real Estate Funding** 40 credit points

You'll form a critical understanding of the principles, theories, techniques and practices relating to property investment and project finance. You'll also get to grips with corporate finance, financial risk management, financial regulation, liquidity, bonds, equity and stock market behaviours.

#### **Investment Appraisal and Valuation** 20 credit points

Develop a detailed and critical understanding of principles, techniques, and practices relating to the appraisal and valuation of capital investments, with an emphasis on real estate investments. You'll develop the skills needed to produce investment and market valuations and appraise real estate investment performance at single asset and portfolio levels.

#### Research Project

20 credit points

Investigate a topic of your choice in an extended research project. Critically analyse existing literature, recommend and apply suitable research methods, analyse data, and produce conclusions and recommendations.

#### OR

In place of the Research Project module you can study:

#### Professional Development and Research Project 20 credit points

You'll undertake an applied research project based on relevant work experience gained prior to your final year. You'll critically analyse existing literature and produce conclusions and recommendations for your chosen case study.

#### Your future career

Our students have graduated into roles such as land acquisition surveyor and graduate surveyor in companies including AXA, Cubit Consulting, NG Chartered Surveyors, Nottingham City Homes and Knight Frank LLP.

To find out more about this course visit ntu.ac.uk/courses and search for Property Finance.



# **Important notes**

#### **Module information**

We regularly review and update our course content based on student and employer feedback, ensuring that all of our courses remain current and relevant. This may result in changes to module content or module availability in future years.

The number of places available on some optional modules may be limited. These will be offered on a first come, first served basis. Students who are unable to select their first choice module will be offered an alternative from the remaining optional modules.

#### **Key information**

Please be aware that the information in the key information boxes comes from a variety of sources and is accurate at the time of going to print. These include: the National Student Survey (NSS 2018), and the latest Destination of Leavers from Higher Education Survey (DLHE, Full-time, First degree, undergraduate leavers 2016-17). This School course brochure is correct at the time of going to print. However, given the passage of time between its publication and the academic year to which it relates, some of the information may change. It is very important therefore that you check the University's website www.ntu.ac.uk before making an application to the University, as some details relating to the course and the status of any validation process, the fees and other costs, as well as related services, may have been updated.

The University will do all that it reasonably can to provide educational services as described in the School course brochure, on the website, or in other documents issued by it, to appropriately enrolled students. Sometimes circumstances beyond the control of the University mean that it cannot provide the educational services described. Examples of such circumstances include:

- (a) industrial action by University staff or third parties;
- (b) the unanticipated departure of key members of University staff;
- (c) power failure;
- (d) acts of terrorism;
- (e) damage to buildings or equipment;
- (f) the acts of any governmental or local authority;
- (g) the demands of the timetable and the availability of academic staff in respect of possible optional subjects;
- (h) where the numbers recruited to a course are so low that it is not possible to deliver an appropriate quality of education for students enrolled on it.

In such circumstances, the University will take all reasonable steps to minimise the resultant disruption to those services and to those students who are affected by, for example, offering those students the opportunity where reasonably possible to move to another course, another institution, or by delivering a modified version of the same course, but the University excludes liability, to the full extent that is possible under the general law, for any loss and / or damage suffered by any applicant or student as a result of such circumstances.

The University will use all reasonable endeavours to deliver the course in accordance with the description applied to it in the University's School course brochure (as updated from time to time on the website or elsewhere) for the academic year in which you begin the course. However, the University will be entitled to make reasonable changes to the course (including to the content and syllabus of the course where developments in the subject area and / or accrediting bodies make that necessary, or to the location of the course, or the method of delivery or assessment of the course) where that will enable the University to deliver a better quality of educational experience to students enrolled on the course. In making any such changes, the University will aim to keep them to the minimum necessary to achieve the required quality of experience, and will notify and consult affected students in advance about any changes that are required. Any changes to its courses are considered through the University's quality assurance process, which engages students through appropriate University committees. If the University changes your course and you are not satisfied with the changes, you will be offered the opportunity to withdraw from the course and, if required, reasonable support to transfer to another provider.

Any offer of a place at the University shall be subject to the University's Terms and Conditions and the University's rules and regulations (as amended from time to time).

See **www.ntu.ac.uk/terms\_conditions** for a copy of the University's Terms and Conditions.

#### Enquiries

adbe.ug-queries@ntu.ac.uk +44 (0)115 848 6800 www.ntu.ac.uk/adbe

**Campus information** 

School of Architecture, Design and the Built Environment Nottingham Trent University 50 Shakespeare Street Nottingham NG1 4FQ University of the Year 2019 The Guardian University Awards 2019 Modern University of the Year **2018** THE SUNDAY TIMES THE SUNDAY TIMES



#### This information can be made available in alternative formats.

Please note that whilst the University has taken all reasonable steps to ensure the accuracy of the content within this brochure at the time of printing, the University reserves the right to remove, vary or amend the content of the brochure at any time. For avoidance of doubt, the information provided within the content of this brochure is for guidance purposes.

© Nottingham Trent University and may not be reproduced or transmitted in any form in whole or in part without the prior written consent of Nottingham Trent University.

8780/05/2019