ENGINEERING AND ARCHITECTURAL DESIGN MEng / UCAS CODE: KH11 2018 ENTRY

www.ucl.ac.uk/prospectus/architecture
This new programme aims to challenge students to develop a critical, independent, experimental and technically rigorous approach to architectural, environmental and structural design and engineering. It has a strong focus on design and the use of advanced fabrication facilities and labs where students are encouraged to develop leading-edge engineering knowledge, judgement and intuition.

Key information

Programme starts
September 2018

Location
London, Hackney Wick (Here East) and London, Bloomsbury

Degree benefits

// Your learning will combine the design-studio model of UCL’s renowned Bartlett School of Architecture with project-based learning in structural, civil and environmental engineering and design, drawing on expertise from the Institute for Environmental Design Engineering (IEDE) and UCL Civil, Environment and Geomatic Engineering (CEGE).

// The programme will be based in new UCL facilities at Queen Elizabeth Olympic Park, a state-of-the-art 4,000m² fabrication, experimentation, testing and study resource with cutting-edge labs fully equipped with digital and analogue fabrication facilities.

// The programme is designed to meet Engineering Council MEng and Architecture degree-level requirements.

// We are also actively seeking accreditation from the Joint Board of Moderators (JBM), which include IStructE and ICE, the Chartered Institute of Building Services Engineers (CIBSE) and Architecture Registration Board (RIBA/ARB) Part 1 exemption.

Research Excellence Framework (REF) 2014

The Research Excellence Framework, or REF, is the system for assessing the quality of research in UK higher education institutions. The 2014 REF was carried out by the UK’s higher education funding bodies, and the results used to allocate research funding from 2015/16.

// 81% rated 4* (‘world-leading’) or 3* (‘internationally excellent’)

Learn more about the scope of UCL’s research, and browse case studies, on our Research Impact website.

Degree structure

In each year of your degree you will take a number of individual modules, normally valued at 0.5 or 1.0 credits, adding up to a total of 4.0 credits for the year. Modules are assessed in the academic year in which they are taken. The balance of compulsory and optional modules varies from programme to programme and year to year. A 1.0 credit is considered equivalent to 15 credits in the European Credit Transfer System (ECTS).

The first three years will provide an integrated programme of teaching and learning across engineering and architecture.

In year one you will develop core mathematics and engineering knowledge and skills by taking eight compulsory modules, all carefully tailored to this programme.

From year two onwards, half of your time will be spent on design labs, where you will develop skills in design and engineering synthesis, enhancing your ability to address design challenges and the built environment.

In your final year you will select two optional modules from a range depending on your particular areas of interest and the specialist skills and knowledge you wish to develop.

YEAR ONE

Core or compulsory module(s)

// Building Physics and Energy
// Building Physics and Environment
// Design Make Live
// History and Theory of Engineering and Architecture
// Making Information
// Materials, Mechanics and Making
// Mathematical Techniques

Optional modules

// All first year modules are compulsory.

YEAR TWO

Core or compulsory module(s)

// Environmentally Responsible Building Systems
// Mathematical Modelling and Analysis
// Structural Analysis and Foundation Design
// Urban Physics
// Design Lab 1: Introduction to Building Design

Optional modules

// All second year modules are compulsory.

YEAR THREE

Core or compulsory module(s)

// Mechanics of Buildings
// Sense, Sensing and Controls
// Practice and Project Management
// Making Buildings
// Design Lab 2: In-depth Building Design

Optional modules

// All third year modules are compulsory
FINAL YEAR

Core or compulsory module(s)

- Design Lab 3: Advanced Building Design Dissertation

Optional modules

- You will select two optional modules from a range of available modules, depending on your interests and the skills you wish to develop. Modules developed specifically for this programme are anticipated to include:
  - Advanced Structural Design and Use of Parametric Modelling
  - BIM and GIS for Design and Retrofit
  - Tall Building Design
  - Organisational Learning and Dispute Resolution
  - Technology and Integration

Your learning

The learning is predominantly design-studio based, and incorporates extensive use of fabrication workshops, engineering laboratories and London as a living lab, with a strong focus on engineering design and research-based learning. Methods include lectures, seminars, tutorials, individual and group work, site visits, field trips, workshops, laboratories, crits, and e-learning.

Assessment

Assessment is focused on coursework submissions, including engineering design portfolios, built prototypes and written submissions. This is supplemented by a range of further methods including formal examination, crits, studio and laboratory assessments, and e-assessments.

Your career

This MEng is designed so that you will actively acquire a broad base of knowledge and skills to meet the educational and professional standards for a senior career in engineering and architectural design.

You will learn to develop, articulate and advocate your own position and will also develop expertise in areas of particular interest via self-directed engineering design and research projects.

The first cohort of students admitted to the Engineering and Architectural Design MEng is due to graduate in 2022. Therefore, information about career destinations for students on this programme is not yet available. Please see first destinations of recent graduates (2013-2015) of other Architecture and Civil and Environmental Engineering programmes at UCL for a selection of representative careers.

Your application

Application for admission should be made through UCAS (the Universities and Colleges Admissions Service). Applicants currently at school or college will be provided with advice on the process; however, applicants who have left school or who are based outside the United Kingdom may obtain information directly from UCAS.

Eligible applicants are invited to submit an assessment task. Shortlisted candidates will be invited to interview where a portfolio of creative work is mandatory. We will be looking for evidence of independent and innovative thinking, ability to draw and/or make, ability to challenge methods and norms, and to solve problems. Portfolios should be between A4 and A1.
**Entry requirements**

**A LEVELS**

**Grades**
AAA

**Subjects**
No specific subjects.

**GCSE**

English Language at grade C or 5. Mathematics and Physics (or Double Award) at grade A or 7 if not offered at A level. For UK-based students, a grade C or 5 or equivalent in a foreign language (other than Ancient Greek, Biblical Hebrew or Latin) is required. UCL provides opportunities to meet the foreign language requirement following enrolment, further details at: www.ucl.ac.uk/ug-reqs

**IB DIPLOMA**

**Points**
38 overall.

**Subjects**
A total of 18 points in three higher level subjects, with no score below 5. Physics must be offered at either higher or standard level.

**OTHER QUALIFICATIONS**

UCL considers a wide range of UK and international qualifications for entry into its undergraduate programmes. Full details are given at: www.ucl.ac.uk/otherquals

**UNDERGRADUATE PREPARATORY CERTIFICATES (International foundation courses)**

The Undergraduate Preparatory Certificates (UPCs) are intensive one-year foundation courses for international students of high academic potential who are aiming to gain access to undergraduate degree programmes at UCL and other top UK universities.

Typical UPC students will be high achievers in a 12-year school system which does not meet the standard required for direct entry to UCL.

For more information see: www.ucl.ac.uk/upc.

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**TUITION FEES**

The fees indicated are for undergraduate entry in the 2018/19 academic year. The UK/EU fees shown are for the first year of the programme at UCL only. The Overseas fees shown are the fees that will be charged to 2018/19 entrants for each year of study on the programme, unless otherwise indicated below.

// UK & EU: £9,250 (2018/19)

// Overseas: £25,020 (2018/19)

Full details of UCL’s tuition fees, tuition fee policy and potential increases to fees can be found on the UCL Students website.

**FUNDING**

Various funding options are available, including student loans, scholarships and bursaries. UK students whose household income falls below a certain level may also be eligible for a non-repayable bursary or for certain scholarships. Please see the Fees and funding pages for more details.

**CONTACT**

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**EU referendum**

For up-to-date information relating to specific key questions following the UK’s decision to leave the EU, please refer to: www.ucl.ac.uk/eu-referendum

**Disclaimer**

This information is for guidance only. It should not be construed as advice nor relied upon and does not form part of any contract. For more information on UCL’s degree programmes please see the UCL Undergraduate Prospectus at www.ucl.ac.uk/prospectus

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