Engineering and Architectural Design MEng

This four-year programme has been designed in close collaboration with industry leaders to combine the major disciplines of architecture and engineering of the built environment and prepare graduates to be future industry leaders.

Key information

Programme starts
September 2020

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 and Engineering (IEDE) and UCL Civil, Environmental & Geomatic Engineering (CEGE).

// The programme is based both in central London and the new UCL Here East 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 includes IStructE and ICE), the Chartered Institute of Building Services Engineers (CIBSE) and Architecture Registration Board (RIBA/ARB) Part 1 exemption.

Accreditation

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Degree structure

The programme is based in the Bartlett School of Architecture with elements of the programme being delivered by the UCL Institute for Environmental Design and Engineering and by UCL Civil, Environmental and Geomatic Engineering (CEGE).

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 seven compulsory modules, all carefully tailored to this programme.

From year two onwards, half of your time will be spent in the design studio, 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 (15 credits)
// Building Physics and Environment (15 credits)
// Design Make Information (15 credits)
// Design Make Live (15 credits)
// History and Theory of Engineering and Architecture (15 credits)
// Materials, Mechanics and Making (30 credits)
// Mathematical Modelling and Analysis 1 (15 credits)

Optional modules

YEAR TWO

Core or compulsory module(s)

// Environmentally Responsible Building Systems (15 credits)
// Advanced Mathematical Modelling and Analysis (15 credits)
// Structural and Foundation Analysis (15 credits)
// Urban Physics (15 credits)
// Design Practice 1 (60 credits)

YEAR THREE

Core or compulsory module(s)

// Mechanics of Buildings (15 credits)
// Sense, Sensing and Controls (15 credits)
// Professional Practice and Management (15 credits)
// Making Buildings (15 credits)
// Design Practice 2 (60 credits)

FINAL YEAR

Core or compulsory module(s)

// Design Practice 3 (60 credits)
// Dissertation (30 credits)

Optional modules

// For Year 4, you will select two optional modules from a range of available modules, depending on your interests and the skills you wish to develop.
Your learning

Your 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 and architectural design and research-based learning. Methods include lectures, seminars, tutorials, individual and group work, site visits, field trips, workshops, laboratories, crits, and e-learning.

Fieldwork

There is one field trip (optional) annually as part of this programme. Maximum cost to the student is £500.

Assessment

Assessment is focused on coursework submissions, including engineering and architectural 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

Students have the opportunity to acquire a broad base of knowledge and skills to meet the educational and professional standards for a successful career in engineering and architecture 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.

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.

Once we have received your application and established that you are likely to meet our entry requirements, we will then invite you to submit sample images from your portfolio of creative work. Shortlisted candidates will be invited to interview with the portfolio. 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.
Entry requirements

A LEVELS
Standard Offer: AAA. No specific subjects.
Contextual Offer: ABB. 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
Standard Offer: 38 points. 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.
Contextual Offer: 34 points. A score of 16 points in three higher level subjects, with no score lower than 5.

CONTEXTUAL OFFERS – ACCESS UCL SCHEME
As part of our commitment to increasing participation from underrepresented groups, students may be eligible for a contextual offer as part of the Access UCL scheme. For more information see www.ucl.ac.uk/prospectus

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)
UCL 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.

TUITION FEES
The fees indicated are for undergraduate entry in the 2020/21 academic year. The UK/EU fees shown are for the first year of the programme at UCL only. Fees for future years may be subject to an inflationary increase. The Overseas fees shown are the fees that will be charged to 2020/21 entrants for each year of study on the programme, unless otherwise indicated below.

// UK & EU: £9,250 (2020/21)
// Overseas: £26,540 (2020/21)

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

ADDITIONAL COSTS
If you are concerned by potential additional costs for books, equipment, etc. on this programme, please get in touch with the Programme Administrator, Mr Dan Carter, by e-mailing dan.carter@ucl.ac.uk or telephoning +44 (0)20 3108 6666.

FUNDING
Funding may be available from the Bartlett School of Architecture or Bartlett Faculty Office.

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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Brexit
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/brexit

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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