INTERNET ENGINEERING
MSc /
2018/19 ENTRY

www.ucl.ac.uk/graduate/eleceng
Internet Engineering MSc

The Internet Engineering MSc is a broad programme encompassing all the fundamental components of the Internet. Graduates acquire the skills necessary to design, manage and maintain the networks that will build the Future Internet, placing them in a prime position at the forefront of this rapidly changing field.

Degree summary

Students develop an understanding of the evolving networks and applications using the internet protocol. Particular attention is given to the convergence of telecommunications and data networks into "all IP"-carrier grade networks. The programme offers specialisms including fundamental network design, applications and services, and security and network management.

UCL Electronic & Electrical Engineering is one of the most highly rated electronic engineering research departments in the UK. Our research and teaching ethos is based on understanding the fundamentals and working at the forefront of technology development.

This MSc offers a wide variety of modules that include the physical layer (optical, wireless), the Internet layer (routing, congestion control, traffic engineering), the application layer (codecs, security) and the “business layer” (regulation, business opportunities).

Lectures are delivered by world-class researchers in all these fields with regular lectures from the main industrial leaders in the telecommunications industry.

The programme is delivered through a combination of formal lectures, guest lectures, tutorials, seminars, laboratory and workshop sessions and project work. Assessment is through unseen written examination, coursework, design exercises and the research project.

Accreditation

Accredited by the Institution of Engineering and Technology (IET) on behalf of the Engineering Council as meeting the requirements for Further Learning for registration as a Chartered Engineer. Candidates must hold a CEng accredited BEng/BSc (Hons) undergraduate first degree to comply with full CEng registration requirements.

Degree structure

Mode: Full-time: 1 year
Location: London, Bloomsbury

Students undertake modules to the value of 180 credits. The programme consists of six core modules (75 credits), three optional modules (45 credits) and a dissertation (60 credits).

CORE MODULES

- Introduction to Telecommunications Networks
- Mobile Communications Systems
- Software for Network and Services Design
- Internet of Things
- Introduction to IP Networks
- Professional Development Module: Transferable Skills (not credit bearing)

OPTIONAL MODULES

- Communications System Modelling
- Network and Services Management
- Telecommunications Business Environment
- Optical Transmission and Networks
- Wireless Communications Principles
- Internet Multimedia Systems

DISSERTATION/REPORT

All students undertake an independent research project which culminates in a dissertation of approximately 12,000 words.
Your career

In the next 15 years, all of the facets of our life will be "online". Our health (bio-sensors, health records), entertainment (games, 3D TV, Virtual Reality), security (children GPS tracking, CCTV) and other social interactions will use fascinating internet applications that are only now being envisaged. Our graduates will be in a prime position at the forefront of this revolution by having in-depth knowledge of all of its components.

Recent graduates have gone on to become graduate engineers, R&D engineers and network services engineers at companies including France Telecom, BT, Huawei, Cisco, Motorola and PwC.

Recent career destinations* include:

- Graduate Software Engineer, Accenture
- Java Developer, Loxbit PA and studying Communication Engineering, University College London (UCL)
- IT Development Officer, China Unicom
- IT Network Development Engineer, BSkyB
- Software Engineer, Air Watch

Employability

The Internet Engineering MSc programme provides a broad and comprehensive coverage of the technological and scientific foundations of telecommunications networks and services, from the physical layer to the application layer. A strong emphasis is given to mobile and wireless communications and the latest standards in these areas (LTE, WiMAX, IEEE 802 family of standards). Students study both the theoretical foundations of all related technologies and also carry out extensive practical assignments in several related areas.
Entry requirements

A minimum of an upper second-class Bachelor’s degree in a relevant discipline from a UK university or an overseas qualification of an equivalent standard.

English language proficiency level

If your education has not been conducted in the English language, you will be expected to demonstrate evidence of an adequate level of English proficiency.

The level of English language proficiency for this programme is: Standard.

Information about the evidence required, acceptable qualifications and test providers is provided at: www.ucl.ac.uk/graduate/english-requirements

Your application

Students are advised to apply as early as possible due to competition for places. Those applying for scholarship funding (particularly overseas applicants) should take note of application deadlines.

When we assess your application we would like to learn:

// why you want to study Internet Engineering at graduate level
// why you want to study Internet Engineering at UCL
// what particularly attracts you to this programme
// how your academic and professional background meets the demands of this programme
// how you envisage your career path after the MSc
// your personal statement should also include a technical summary of your final-year project including the aims and technical achievements.

Together with essential academic requirements, the personal statement is your opportunity to illustrate whether your reasons for applying to this programme match what the programme will deliver.

Application fee: There is an application processing fee for this programme of £75 for online applications and £100 for paper applications. More details about the application fee can be found at www.ucl.ac.uk/prospective-students/graduate/taught/application.

FEES AND FUNDING 2018/19 ENTRY

// UK: £12,380 (FT), £N/A (PT)
// EU: £12,380 (FT), £N/A (PT)
// Overseas: £25,880 (FT), £N/A (PT)

The tuition fees shown are for the year indicated above. Fees for subsequent years may increase or otherwise vary. Further information on fee status, fee increases and the fee schedule can be viewed on the UCL Current Students website.

The Institution of Engineering and Technology (IET) awards competitive scholarships for postgraduate study, for details visit www.theiet.org

Please visit the UCL Electronic and Electrical Engineering Scholarships website for more information on funding.

Full details of funding opportunities can be found on the UCL Scholarships website: www.ucl.ac.uk/scholarships

APPLICATION DEADLINE

All applicants: 27 July 2018

Details on how to apply are available on the website at: www.ucl.ac.uk/graduate/apply

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

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 Graduate Prospectus at www.ucl.ac.uk/graduate