Earthquake Engineering with Disaster Management MSc / 2018/19 Entry

www.ucl.ac.uk/graduate/cege
The Earthquake Engineering with Disaster Management (EEDM) MSc combines specialist structural and earthquake engineering knowledge with an advanced understanding of risk modelling for natural hazards in order to produce engineers who can deliver design holistic solutions and are able to work in engineering, catastrophe modelling and disaster management roles.

**Degree summary**

Graduates will be able to: determine the vulnerability of ordinary and special structures to seismic actions apply both current seismic codes and novel unconventional methodologies of seismic design, repair and assessment; assess the adequacy, economic viability and life-saving effectiveness of pre-event risk mitigation and post-event risk management solutions.

- UCL Civil, Environmental & Geomatic Engineering hosts EPICentre, a leading research centre in earthquake engineering, and provides an exciting environment in which to explore this new, multidisciplinary and constantly evolving science.
- The programme has extensive links to industry through professional engineers and disaster managers who deliver lectures and seminars and support students on their research projects as industrial supervisors.
- Students benefit from a voluntary field trip to the closest location of a recent major earthquake to study disaster management and the effects of the earthquake on the built environment, structural strengthening techniques and disaster management.

Taught modules have been developed and are delivered in collaboration with experts from industry and non-governmental organisations. In addition a field trip is organised every year to an earthquake affected region.

**Degree structure**

Mode: Full-time: 1 year; Part-time: 2 years; Flexible: up to 5 years

Location: London, Bloomsbury

Students undertake modules to the value of 180 credits. The programme consists of seven core modules (105 credits), one optional module (15 credits) and a research project (60 credits).

A Postgraduate Diploma (120 credits) consisting of seven core modules (105 credits) and one optional module (15 credits) is offered.

### Degree structure

**CORE MODULES**

- Geotechnical Earthquake Engineering
- Structural Dynamics
- Disaster Risk Reduction
- Introduction to Seismic Design of Structures
- Advanced Seismic Design Structures
- Seismic Risk Assessment
- Seismic Loss Mitigation and Strengthening of Low-Engineered Buildings

**OPTIONAL MODULES**

- Advanced Structural Analysis
- Catastrophe Risk Modelling
- Finite Element Modelling and Numerical Methods
- Natural and Environmental Disasters
- Integrating Science into Risk and Disaster Reduction

**DISSERTATION/REPORT**

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

Students graduate with strong technical engineering skills and rarely taught knowledge of risk evaluation. They are also able to understand the wider implications of disasters and are exposed to both industry and non-governmental organisations (NGOs). Graduates have gone on to successful careers in the civil engineering industry, in international NGOs, in the financial sector, and in academia.

Recent career destinations* include:
- Assistant Engineer, Wuzhou Engineering Corporation Ltd.
- Design Civil Engineer, Cyprus Ministry of Education and Culture
- ENgineer in HSE and Disaster management, MHS, Mabna Sazeh Houshmand, IRAN
- PhD Earthquake Sciences, UCL
- PhD Strengthening Buildings and Structure, The Cyprus University of Technology

Employability

The programme aims to create a new type of global earthquake engineer able to take a holistic approach to earthquake engineering and disaster management. Graduates of the programme will have developed the specialist skills necessary for a career in the engineering sector and other areas that require knowledge and understanding of earthquake engineering and disaster risk management/mitigation principles. The MSc is accredited by the Institute of Civil Engineers as a further learning programme that can count towards chartership.

* Careers data is taken from the ‘Destinations of Leavers from Higher Education’ survey undertaken by HESA looking at the destinations of UK and EU students in the 2013-2015 graduating cohorts six months after graduation.
Entry requirements

A minimum of a second-class UK Bachelor’s degree in a relevant discipline, or an overseas qualification of an equivalent standard. Extensive work experience covering related areas will be considered in addition to academic qualifications.

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 Earthquake Engineering with Disaster Management at graduate level
// why you want to study Earthquake Engineering with Disaster Management at UCL
// what particularly attracts you to this programme
// how your personal, academic and professional background meets the demands of a challenging programme
// where you would like to go professionally with your degree

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), £6,190 (PT)
// EU: £12,380 (FT), £6,190 (PT)
// Overseas: £25,880 (FT), £12,950 (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.

Fees for flexible, modular study are charged pro-rata to the appropriate full-time Master’s fee taken in an academic session.

This programme qualifies for the Commonwealth Shared Scholarship Scheme, suitable for nationals residing in Commonwealth developing countries who wish to study a one-year taught UK Masters programme.

The scholarship covers tuition fees and air fares to and from the UK.

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