SPACE RISK AND DISASTER REDUCTION MSc / 2019/20 ENTRY
www.ucl.ac.uk/graduate/
Space Risk and Disaster Reduction MSc

Uniting emergency response, disaster risk reduction and space technology this programme is designed to prepare students to work in the fields of satellite technology and disaster response. Students will explore the management of risk and disaster losses from a range of perspectives, focusing on emerging risks posed to modern technology by space weather and the monitoring of hazards on Earth from outer space.

Degree summary

Students will learn about a wide variety of natural hazards, how to prepare and plan for emergencies and disasters and how to respond. Students will also learn practical aspects of designing, building and operating satellites and spacecraft including the challenges and risks posed by the environment of outer space.

Our students benefit from direct access to key government and business drivers in the field of space weather, with invited seminars and research projects supported by the UK Met Office, EDF, Atkins and other institutions interested in the hazards of space.

The natural hazard of space weather is a "new" hazard which has only recently been identified as a significant risk to human society. As the first generation of researchers, practitioners and engineers in this field, students will be at the forefront of major new issues in an expanding sector of the economy. As disaster response comes to rely on more advanced technology aid, relief and disaster response agencies require experts trained in the technological infrastructure to innovate, explain, operate and understand the limitations of these novel systems and the help they can provide before, during and after disasters.

The programme will also provide students with advanced training in many transferrable skills, such as computer programming, technical writing, oral and written presentation, the use of engineering design tools and graphic visualisation software.

Teaching is delivered by lectures, seminars and interactive problem sessions. Assessment is by examination, poster, presentation and written essay coursework.

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 (90 credits), two optional modules (30 credits) and a dissertation (60 credits).

Please note that the list of modules given here is indicative. This information is published a long time in advance of enrolment and module content and availability is subject to change.

COMPULSORY MODULES

- Integrating Science into Risk and Disaster Reduction
- Emergency and Crisis Management
- Research Appraisal and Proposal
- The Variable Sun: Space Weather Risks
- Space Science, Environment and Satellite Missions
- Space Systems Engineering

OPTIONAL MODULES

Students choose two 15-credit optional modules from the following:

- Decision and Risk Statistics
- Emergency and Crisis Planning
- Global Monitoring and Security
- Mechanical Design of Spacecraft
- Natural and Anthropogenic Hazards and Vulnerability
- Risk and Disaster Research Tools
- Space-Based Communication Systems
- Space Instrumentation and Applications
- Spacecraft Design - Electronic Sub-systems
- Space Systems Engineering

Optional modules are subject to availability of places.

DISSERTATION/REPORT

All students undertake an independent project culminating in a report of between 10,000 and 12,000 words.

Optional, UK-based field trips are available. Travel and accommodation costs will be covered by IRDR, students will need to pay for their meals.

Previous field visits have included: the Thames Barrier and disaster management; Cambridge flood hazard; a disaster scenario exercise with NGO Rescue Global; the Blacknest Seismological Observatory; the Met Office; Southwest England for integrated group projects covering hazard mapping, hazard modelling, vulnerability assessment, and critical infrastructure assessment, with Hinkley Point nuclear power station as an example.
Your career

This programme aims to prepare students for careers in space research, space and defence industries as well as most industries with risk management requirements.
Entry requirements

Normally a minimum of an upper second-class UK Bachelor’s degree in a relevant discipline 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: Good.

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 for a Master's degree in Space Risk and Disaster Reduction
// why you want to enter a programme of study at UCL
// what particularly attracts you to this programme, how have you heard of it and what do you want to get from it
// how your academic and professional background meets the entry requirements and the demands of this programme, considering the topics that are taught in it
// where you would like to go professionally with your degree, i.e. which kind of career you intend to pursue

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, and how prepared you are to face the challenges it poses (e.g. large project component, individual and in a team, and taught advanced topics).

There is an application processing fee for this programme of £75 for online applications and £100 for paper applications. Further information can be found at:

www.ucl.ac.uk/prospective-students/graduate/taught/application.

FEES AND FUNDING 2019/20 ENTRY

// UK: £10,150 (FT)
// EU: £10,150 (FT)
// Overseas: £24,250 (FT)

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 Students website.

The UCL Institute for Risk and Disaster Reduction has scholarships available for this programme. See IRDR Masters Programmes - and look for the “Funding” section of that page.

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

APPLICATION DEADLINE

All applicants: 26 July 2019

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/brexit