UCL Institute for Risk and Disaster Reduction

Risk, Disaster and Resilience MSc
2017/18 entry
www.ucl.ac.uk/rdr/

Amatrice, following 2016 Earthquake, Italy
Risk, Disaster and Resilience MSc

The disaster risk management industry needs professionalising. Academic study can underpin this professionalisation, enabling you to apply evidence and research based theory to this sector. Through a multidisciplinary approach to risk and disaster reduction, you will learn to become a future leader driving policy change and innovation in order to preserve lives and sustain economies which could otherwise be destroyed or damaged by disaster. You will gain expertise in analysing complex challenges and providing sustainable solutions.

Programme themes

Physical and Social Science of Natural and Anthropogenic Hazards
   What is known and unknown
   Current research and uncertainties

Understanding Vulnerability
   From fragility curves describing damage of buildings to social vulnerability of individuals and society

Quantifying Risk
   What is risk and how do we measure it?
   Components of risk: hazard, vulnerability, exposure

Managing Disasters
   How to apply plans to manage real emergencies

Multidisciplinary Holistic Approaches - from Theory to Practice
   Integrating scientific knowledge into disaster risk reduction
   Communicating with stakeholders
   Skills to conduct and appraise research and policy

Teaching and learning

Learn from world-class researchers and professionals delivering the programme through a combination of lectures, class discussions, problem-solving exercises, practicals, field trips, directed reading and a practitioner-led real-time disaster scenario event. There is an emphasis on hands-on learning and tutorial-style dialogue between students and lecturers.

Assessment is by individual and group presentations, coursework, written examinations, and a research project.

Why study at UCL-IRDR?

UCL is one of the world’s leading universities, regularly featuring in the top 10 in global rankings.

The Institute for Risk and Disaster Reduction (IRDR), leads multidisciplinary research, knowledge exchange and advanced teaching across UCL. We have global, national and local recognition, evidenced by international attendance at our annual Academic Summit, our Annual Conference addressed by the UK Government’s Chief Scientific Advisor, and our training of London Resilience’s gold command. As a student, you will be encouraged to join our active seminar series, high-profile public discussion meetings and the networking events we host.

London is one of the world’s great cosmopolitan cities. It is an international hub for global finance and risk management, NGOs, and engineering consultancies. The IRDR nurtures networks across London, and beyond.

“London itself is an unparalleled breeding ground of ideas for anyone interested in research” (MSc student 2015/16)

Careers

Whether you wish to start a new career in risk and disaster reduction or you already have experience we are here to support you. With an MSc in Risk, Disaster and Resilience you will have excellent academic credibility coupled with practical and analytical skills.

We run an annual Careers and Opportunities Forum which offers expert and targeted advice, and hosts stalls from a range of employers and headhunters in the field of risk and disaster reduction. Our alumni are highly sought-after in the following sectors: insurance, catastrophe modelling, risk management, public policy, humanitarian development, NGOs, business continuity, government, emergency services, consultancy, and academia.

Some career destinations of recent IRDR graduates:
- Disaster Risk Management Consultant, World Bank
- Project Officer, Global Risk Forum Davos
- Coastal Risk Management Officer, Environment Agency
- Project Officer, Cairo Local Government
- Civil Contingencies Coordinator, UK Local Government
- Risk & Business Continuity Officer, County Fire & Rescue
- Field Delegate, Red Cross
- Resilience Technical Officer, International Medical Corps
- Project Officer, Rescue Global
- Business Continuity & Resilience Consultant, PwC
- Underwriting Assistant, MS Amlin
- Catastrophe Analyst, Barbican Insurance Group
### Programme structure

Mode of study: Full time: 1 year. Part time: 2 years

Students take eight taught modules and an independent research project.

A Postgraduate Diploma comprising eight taught modules can be taken full-time, or part-time over two years.

For further information see [www.ucl.ac.uk/rdr/](http://www.ucl.ac.uk/rdr/)

### Degree Programme Modules

<table>
<thead>
<tr>
<th>Available modules and content may vary</th>
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<tbody>
<tr>
<td><strong>Two compulsory core taught modules (15 credits each)</strong></td>
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<tr>
<td><strong>1 Integrating Science into Risk and Disaster Reduction</strong></td>
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<td>Risk, uncertainty &amp; disasters</td>
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<td>Insurance and risk transfer</td>
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<td><strong>Two compulsory programme-specific core modules (15 credits each)</strong></td>
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<td><strong>1 Natural and Anthropogenic Hazards and Vulnerability</strong></td>
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<td>Scientific causes</td>
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<td>Severity and frequency</td>
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<td><strong>Two compulsory taught skills modules (15 credits each)</strong></td>
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<tr>
<td><strong>1 Risk and Disaster Reduction Research Tools</strong></td>
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<td>Statistical methods</td>
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<td>Programming in R</td>
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<td><strong>Two optional modules from among the following (15 credits each)</strong></td>
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<td><strong>1 Conflict, Humanitarianism &amp; Disaster Risk Reduction</strong></td>
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<td>Humanitarian response</td>
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<td><strong>3 Risk, Power and Uncertainty</strong></td>
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<td>Anthropology of risk</td>
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<td><strong>5 Post Disaster Recovery</strong></td>
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<td>Policies and Practices</td>
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<td><strong>7 Space Weather Risks</strong></td>
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<td>Satellite vulnerability</td>
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<td><strong>9 Risk and Contingency Planning</strong></td>
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<td>Analyse security threats</td>
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**Independent project (60 credits)**

The independent research project culminates in a 10,000 to 12,000 word dissertation and poster presentation. Projects may be field, theory or modelling based and can be conducted in collaboration with external industry or NGO partners.

**Field trips and exercises**

Current field visits include the Thames Barrier and disaster management, Cambridge flood hazard and exposure, a disaster scenario exercise with NGO Rescue Global, and Southwest England for integrated group projects including hazard mapping, hazard modelling, vulnerability assessment and critical infrastructure assessment.
MSc Risk, Disaster and Resilience

Key information

Programme starts
September 2017

Modes and duration
Full time: 1 year  Part time: 2 years

Tuition fees (2017/18)
UK/EU: £9,840 (FT)  £4,970 (PT)
Overseas: £22,850 (FT) £11,800 (PT)

Scholarships
Motorola Solutions Foundation scholarships are available for the full time MSc Programme: https://www.ucl.ac.uk/rdr/irdr/general-news/motorola-scholarship-announcement

UCL offers a selection of scholarships for supporting postgraduate studies. Details of funding opportunities can be found at: www.ucl.ac.uk/scholarships

Application dates
Open: 3 October 2016  Close: 28 July 2017

Note on fees: The tuition fees shown are for the year indicated above. Fees for subsequent years may increase or otherwise vary. Further information can be viewed on the UCL Current Students website.

Optional qualifications: This degree is also available as a PG Diploma with fees set accordingly.

Location:
London, Bloomsbury

Entry requirements
Normally a minimum of an upper second-class UK Bachelor's degree in a relevant science discipline, engineering or mathematics, or an equivalent overseas qualification.

Mathematics requirements
None, but there are some quantitative methods in the course

English language requirements
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 English language level for this programme is: Good

International students
Country-specific information, including details of when UCL representatives are visiting your part of the world, can be obtained from the UCL International Students website.