MSc in Risk, Resilience and Sustainability

1 year Full Time or 2 years Part Time



Introduction

Risk, Resilience and Sustainability are three keywords of our time. A deeper understanding of risk, the ways in which it is generated, experienced and managed is fundamental to addressing many of our pressing societal issues. Concepts such as 'critical infrastructure' underpin government initiatives to prepare, and manage for, global challenges such as climate change, natural disasters, ecological uncertainty, and extreme social inequity.

The concept of sustainability is heavily enshrined in the UN Sustainable Development Goals (SDGs), which have been widely taken up

as a road map for future development around the world.

The key objective of the course is to explore how sustainability and resilience work together in the safeguarding of ecosystem services. The degree provides key training in critical skills such as GIS, Remote Sensing and with the option to specialise in coastal risk through (i) INFOMAR Seabed Mapping Marine training and (ii) INFOMAR Marine and Survey data (ship time) modules. Other module choices allow for specialization in aspects of sustainability relating to cities and the Global South.

Course Highlight

UCD School of Geography

Geography as a discipline offers expertise in the environment (e.g. hazards such as earthquakes, volcanic eruptions, tsunamis, cyclones, floods and other environmental hazards) and the societal dimensions of risk, resilience and sustainability and is well placed to offer an interdisciplinary framework. It develops the Schools vision of creating cutting edge research-led teaching that works towards 'shaping the future' in ways that are not only more environmentally sustainable, but also through addressing issues of critical importance to 'future proofing earth'.

Programme Content and Structure

90 credits

60 credits aught modules

30 credits Dissertation

Core modules:

Over the course of the Masters, you will complete five core modules:

- · Natural hazards and risk
- · Research design
- GIS Principles & Applications
- Dissertation
- Fieldtrip

Optional modules:

You will choose four further modules, with choices including:

- Coastal Risks
- Practical Environmental Assessment
- Population Patterns and Challenges
- Geodesign for Urban Futures
- Advanced GIS Applications
- Remote Sensing
- INFOMAR Seabed Mapping Marine training
- INFOMAR Marine and Survey data (Ship-time)
- Internship



Integrated Mapping for the Sustainable Development of Ireland's Marine Resource

Why study at UCD?



Graduate Education

12,000 graduate students; 17% graduate research students; structured PhDs



Graduate Employability

Ranked no. 1 in Ireland in QS Graduate Employability ranking



Global Careers

Dedicated careers support; 2 year stayback visa to work in Ireland



Global Community

9,500 international students and 300,000 alumni network across 165 countries



Global Profile

UCD is ranked in the top 1% of higher education institutions worldwide



Welcoming Campus

Modern parkland campus with 24 hr security. Wide range of facilities, clubs, societies and supports



Career Opportunities

Sustainability and resilience are increasingly key agenda items for international and local governments and businesses. The MSc in Risk, Resilience and Sustainability offers direct employment prospects in environmental protection agencies (e.g EPA, OPW and GSI), International organisations such as the UN, the European Environment Agency and the European Commission, government departments and state agencies addressing global challenges. As a broadly trained problem-solver in the area of risk, resilience and sustainability you will possess core skills to analyse issues relevant to many industries,

NGOs and organisations concerned with social and environmental strategies.

Your training, including core skills in GIS and remote sensing, communication and collaborative thinking, will make an impact on many organisations and on people. Understanding Risk, Resilience and Sustainability and the intellectual and practical skills developed are designed to enable graduates to understand the world in order to change it. With a further degree, you can also contribute to sustainability by becoming a researcher/scientist.

Applicant Profile

- A primary degree with at least GPA 3.08 (2.1/2H1) or international equivalent in Geography or a related discipline.
- We would encourage applicants from those with at least a GPA 3.08 (2.1/2H1) in a cognate area that provides appropriate background to the programme.
- In certain circumstances, we will consider students who have a GPA 2.48 (2H2) and some relevant work or other experience. Contact jonathan.turner@ucd.ie. This includes students returning to study after a break.
- Applicants whose first language is not English must also demonstrate English language proficiency of IELTS 6.5 (no band less than 6.0 in each element), or equivalent.

Fees and Scholarships

Tuition fee information is available on www.ucd.ie/fees. Please note that the costs of travel and subsistence for some fieldwork modules are borne by the student.

UCD offers a number of graduate scholarships for full-time, self-funding international students, holding an offer of a place on a UCD masters programme. Please see www.ucd.ie/global/scholarships for further information.

Related Masters

- MSc GIS and Remote Sensing
- MA Critical Geographies: Crises, Climate & Inequality
- MA Geography
- MA Geopolitics and the Global Economy
- MSc Urban Data Analytics

Student Profile



Siofra Handibode 2023-24 Graduate

"I wholeheartedly recommend the Master's program in Risk, Resilience and Sustainability at the UCD School of Geography. The program went beyond the basics, offering an exploration into crucial topics needed to better understand our rapidly changing world, such as geographic information systems, coastal risks, natural hazards, remote sensing and fieldwork both onshore and offshore Ireland as well as abroad. These modules have prepared me for the complexities of understanding the risks, building resilience and moving towards a sustainable future.

The professors at the school weren't just instructors; they were mentors. Their expertise and guidance were invaluable throughout the program, and I will be forever grateful for their immense interest in their students. This program challenged me to think critically and pushed me beyond my comfort zone. With graduation on the horizon, I feel equipped with the skills and knowledge to make a real difference in the world."

Graduate Diploma

This course is also offered as a Graduate Diploma. Students on this pathway will complete 60 credits of taught modules but not the dissertation. While applicants can apply to the Graduate Diploma directly, students on the MSc can also transfer to this pathway during the year

CONTACT US