University College Dublin
Ireland's Global University

Course codes:
**W464 (FT)**
**W465 (PT)**

# 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 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** taught masters | **60 credits** Taught modules | **30 credits** Dissertation

### Core modules include:

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

- Hazards, Risk and Resilience
- Research design (I and II)
- Introduction to GIS
- Dissertation
- Fieldtrip (chosen from Global South Fieldwork: Vietnam or International Urban Fieldwork)

### Optional modules:

You will choose four further modules, with choices including:

- Costal Risks
- Practical Environmental Assessment
- Population Patterns and Challenges
- Physical Geography of Cities
- Advanced GIS
- Remote Sensing
- INFOMAR Seabed Mapping Marine training
- INFOMAR Marine and Survey data (Ship-time)

INFOMAR
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

8,500 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.

## Student Profile

**Aoife Bennett**
2021-22 Graduate

"Having just completed the MSc in Risk, Resilience and Sustainability, I cannot recommend the programme enough. The array of interactive, practical modules on relevant topics such as Natural Hazards, Coastal Risks, Fieldwork in the Global South, Physical Geographies of Cities, Remote Sensing and Geographic Information Systems, helped to provide me with an invaluable educational experience.

Using the techniques acquired in these modules, as well as the support of the wonderful faculty, I investigated and evaluated both physical and social vulnerabilities to coastal erosion in Cat Hai, a small island district located in Northern Vietnam, for my final thesis. This was an extraordinary experience and has facilitated the development of numerous friendships and connections as well as a deep interest on coastal risks and their societal implications"

## 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 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 Geospatial Data Analysis
- MSc Critical Geographies: Power and Inequalities
- MA Geography
- MA Geopolitics and the Global Economy


CONTACT US

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This programme receives significant interest so please apply early online at
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