MSc Applied Geospatial Analysis

Geographic Information Systems and Remote Sensing for Social and Environmental Sciences
(1 Year Full-time or 2 Years Part-time)

Geographic Information Systems (GIS) and Remote Sensing are considered essential tools to spatially explore, analyse, visualise and disseminate data; and these skills are increasingly highly sought after in the workplace. The MSc in Applied Geospatial Analysis will provide you with strong theoretical, conceptual and practical foundation on spatial analytics, covering legislative requirements and ethical considerations. The aim of the programme is to provide you with the skillset for real-world spatial exploration of social, economic and environmental patterns and interactions in support of evidence-based planning and decision-making. It will afford you the opportunity to apply acquired skills in pragmatic contextual settings.

Practical skills for the workplace

At the end of the programme you will have practical and applied GIS/remote sensing skills for problem-solving; and knowledge and understanding of tools, methods and applications within geographic research and practice, across a range of disciplines and work areas. The programme includes guest speakers from research and industry, exposing you to potential internship and career opportunities in the area.

Course Content and Structure

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<th>90 credits</th>
<th>Taught Masters</th>
<th>60 credits</th>
<th>Taught Modules</th>
<th>30 credits</th>
<th>Dissertation</th>
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The core modules will place large emphasis on practical hands-on skill building on GIS/remote sensing, applied to real world case-study analysis. A range of optional modules will provide the flexibility to shape learning to your own research or career needs. All optional modules will have an applied geospatial analysis component. There is also an option to do a Postgraduate Diploma in Applied Geospatial Analysis (by not undertaking the dissertation component of the programme).

Core modules:
- Applied GIS
- Advanced GIS
- Remote Sensing
- Research Design
- Thesis

Indicative optional modules:
- Geo-spatial Technologies
- Practical Environmental Assessment
- Redrawing Dublin
- Urban Rivers
- Geographies of the Global South
- Critical Geopolitics of Europe
- International Economic Crisis
- Latin America
- Quantitative Data Analytics & Applications
- GIS in Archaeology
- Social Simulation, Methods and Models

Why study at UCD?

**Tradition**
Established 1854, with 160 years of teaching & research excellence

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

**Global community**
Over 6,000 international students from over 120 countries study at UCD

**Global careers**
Degrees with high employability; dedicated careers support; 1 year stay-back visa for Non-EU students

**Safety**
Modern parkland campus with 24 hour security, minutes from Dublin city centre
Career Opportunities

This program will provide you with practical and applied GIS/remote sensing abilities as well as a range of academic and transferable skills that will be a benefit in many careers. Graduates of this programme may progress to doctoral study or to careers in:

- Environmental and planning consultancies
- Governmental departments and local authorities
- State and semi-state agencies (e.g. Central Statistics Office, Environmental Protection Agency, Ordnance Survey Ireland)
- Industry (e.g. ESRI, Google)
- Think tanks and research bodies

Staff Profile

Dr Ainhoa González
Programme Director

Dr Ainhoa González’s main area of study concerns the development and application of geospatial analysis tools and methods for assessing environmental change and impacts, with the objective of providing a robust evidence-base in support of informed planning and decision-making. She specialises in Strategic Environmental Assessment. Ainhoa has taught graduate and postgraduate modules in Geographic Information Systems, Spatial Data Management, Geographic Analysis, Environmental Geography and Environmental Impact Assessment across a number of Irish Universities. She has also worked as a freelance environmental consultant and spatial analyst, supporting the work of a number of Irish and international authorities. Ainhoa has collaborated in several interdisciplinary European and national projects, with a main role in developing pragmatic assessment methods for bridging science and practice. She holds a PhD in Environmental Planning from the Dublin Institute of Technology and an MSc in Environmental Resource Management from University College Dublin.

Entry Requirements

- Applicants should have a minimum of an upper second class honours (2:1) degree or international equivalent at bachelors level.
- Relevant professional or voluntary experience may be considered as part of the application process.
- 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.
- Applicants should have basic computer skills.

Fees
Fee information at www.ucd.ie/fees

Contact Us

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Related Masters

MSc Urban Environment
MSc Geographies of the Global South
MA Geography
MA Geopolitics and Global Economy

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