



**Irish Aid**

Rialtas na hÉireann

Government of Ireland

**Ireland Fellows Programme -  
SIDS**

2021-2022 Directory of Eligible Postgraduate  
Programmes in Irish Higher Education  
Institutions

# Important Information for Applicants

## ABOUT THIS DIRECTORY

This directory should be read alongside the guidance notes and the programme application form. These notes explain the application process and you are advised to study them carefully.

On your application form, you are required to identify the *specific* postgraduate programme(s) in order of preference, which you are interested in undertaking, based on the information in this directory and the latest details provided by the relevant institution. You should not rely solely on the information in this document, as the information about programmes provided by institutions at the time of publishing this directory may be subject to change. **Before preparing or submitting an application, you are advised to check all details with the online information provided by the college. You should particularly ensure that you meet all eligibility requirements for the selected programme(s).** It is also important that you research the institution(s) you propose to study at to ensure that it is a good fit for you and will meet your expectations.

Information on making a programme application will be provided to candidates shortlisted by the Embassy of Ireland in March 2021. **Fellowship applicants are advised NOT to apply for any programmes in Ireland until after they have been shortlisted for a Fellowship award following interviews (Stage 3).** Please note that application fees will be paid by the Department of Foreign Affairs for *shortlisted candidates only*. Reimbursements will not be made where a shortlisted candidate applies for a programme before being formally approved by the Embassy of Ireland to do so.

## FELLOWSHIP PROGRAMMES INCLUDED

This directory covers all programmes offered under the Ireland Fellows Programme – SIDS.

## WEB ADDRESSES

Throughout the listings, many long web addresses for programme information have been shortened, for example: [www.bit.ly/qEdRCn](http://www.bit.ly/qEdRCn). This format allows for easier transcription, if required. Any capitalisation should be noted accurately as these shortened addresses are case-sensitive. While every effort has been taken to ensure all website links work, these links may change after the publication of the directory, but all programmes can be found by going directly to the institution's website.

## ENGLISH LANGUAGE PROFICIENCY

Irish higher education institutions require a high standard of English language proficiency and this must be formally certified, normally through the International English Language Testing System (IELTS - [www.ielts.org](http://www.ielts.org)).

IELTS examines competency in English language across reading, writing, speaking and listening and is necessary for admission to all Irish HEIs. Most HEIs require a score of 6.5 overall, and where this is the case the IELTS requirement is not noted in this Directory.

Please note that **some programmes in Ireland may specify a higher IELTS requirement** than above for admission. Where possible, this is indicated in the listings. **Programmes marked with an asterisk (\*) have more stringent IELTS**

requirements than an overall score of 6.5. Some will have minimum score requirements for each individual band; some will require a minimum 7.0 overall score or higher.

While we have made every effort to identify those programmes which have a higher IELTS requirement than an overall score of 6.5, applicants are asked to please check the programme webpage or contact the college directly to confirm the IELTS requirements for any programme(s) they are considering applying to.

#### KEY TO IRISH UNIVERSITIES, INSTITUTES OF TECHNOLOGY AND COLLEGES WITH LISTED PROGRAMMES

<b>AIT</b>	<b>Athlone Institute of Technology</b>	Athlone	<a href="http://www.ait.ie">www.ait.ie</a>
<b>CIT</b>	<b>Cork Institute of Technology</b>	Cork	<a href="http://www.cit.ie">www.cit.ie</a>
<b>DBS</b>	<b>Dublin Business School</b>	Dublin	<a href="http://www.dbs.ie">www.dbs.ie</a>
<b>DCU</b>	<b>Dublin City University</b>	Dublin	<a href="http://www.dcu.ie">www.dcu.ie</a>
<b>GCC</b>	<b>Griffith College Cork</b>	Cork	<a href="http://www.griffith.ie">www.griffith.ie</a>
<b>GCD</b>	<b>Griffith College Dublin</b>	Dublin	<a href="http://www.griffith.ie">www.griffith.ie</a>
<b>GCL</b>	<b>Griffith College Limerick</b>	Limerick	<a href="http://www.griffith.ie">www.griffith.ie</a>
<b>GMIT</b>	<b>Galway-Mayo Institute of Technology</b>	Galway	<a href="http://www.gmit.ie">www.gmit.ie</a>
<b>IADT</b>	<b>Institute of Art, Design and Technology</b>	Dublin	<a href="http://www.iadt.ie">www.iadt.ie</a>
<b>ICHAS</b>	<b>Irish College of Humanities &amp; Applied Sciences</b>	Limerick	<a href="http://www.ichas.ie">www.ichas.ie</a>
<b>ITC</b>	<b>Institute of Technology, Carlow</b>	Carlow	<a href="http://www.itcarlow.ie">www.itcarlow.ie</a>
<b>LIT</b>	<b>Limerick Institute of Technology</b>	Limerick	<a href="http://www.lit.ie">www.lit.ie</a>
<b>MIC</b>	<b>Mary Immaculate College</b>	Limerick	<a href="http://www.mic.ie">www.mic.ie</a>
<b>MU</b>	<b>Maynooth University</b>	near Dublin	<a href="http://www.maynoothuniversity.ie">www.maynoothuniversity.ie</a>
<b>NCAD</b>	<b>National College of Art and Design</b>	Dublin	<a href="http://www.ncad.ie">www.ncad.ie</a>
<b>NCI</b>	<b>National College of Ireland</b>	Dublin	<a href="http://www.ncirl.ie">www.ncirl.ie</a>
<b>NUIG</b>	<b>National University of Ireland, Galway</b>	Galway	<a href="http://www.nuigalway.ie">www.nuigalway.ie</a>
<b>SAC</b>	<b>St. Angela's College</b>	Sligo	<a href="http://www.stangelas.nuigalway.ie">www.stangelas.nuigalway.ie</a>
<b>TCD</b>	<b>Trinity College Dublin</b>	Dublin	<a href="http://www.tcd.ie">www.tcd.ie</a>
<b>TUD</b>	<b>Technological University Dublin</b>	Dublin	<a href="http://www.dit.ie">www.dit.ie</a>
<b>UCC</b>	<b>University College Cork</b>	Cork	<a href="http://www.ucc.ie">www.ucc.ie</a>
<b>UCD</b>	<b>University College Dublin</b>	Dublin	<a href="http://www.ucd.ie">www.ucd.ie</a>
<b>UCDMS</b>	<b>UCD Michael Smurfit Business School</b>	Dublin	<a href="http://www.smurfitschool.ie">www.smurfitschool.ie</a>
<b>UL</b>	<b>University of Limerick</b>	Limerick	<a href="http://www.ul.ie">www.ul.ie</a>
<b>WIT</b>	<b>Waterford Institute of Technology</b>	Waterford	<a href="http://www.wit.ie">www.wit.ie</a>

(See overleaf for map)

# Map of Ireland

The cities and towns with universities, Institutes of Technology and colleges that are included in this directory are **highlighted** below (for a listing of the institutions, please see p iii)



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Programmes marked with an asterisk (\*) are programmes that have IELTS requirements other than simply an overall score of 6.5. Some will have minimum score requirements for each individual band; some will require a minimum 7.0 overall score or higher. Please check the programme webpage for more information. IELTS requirements for other programmes may also change after the publication of this directory, so please check the programme webpage or contact the college directly to confirm the IELTS requirements for any programme(s) you are considering.

### **A Climate Change and Resilience, Environment, Marine, Sustainable Development, GIS**

A1	MSc in Climate Change: Policy, Media and Society*	DCU
A2	MSc in Climate Change	MU
A3	MSc in Climate Change, Agriculture and Food Security*	NUIG
A4	MSc in Co-operatives, Agri-Food and Sustainable Development*	UCC
A5	MSc in Food Security Policy and Management*	UCC
A6	MSc (Agr) in Sustainable Agriculture and Rural Development*	UCD
A7	MSc in Applied Marine Conservation*	GMIT
A8	MSc in Coastal & Marine Environments: Physical Processes, Policy & Practice*	NUIG
A9	MSc in Applied Coastal and Marine Management*	UCC
A10	MSc in Geographical Information Systems & Remote Sensing	MU
A11	MSc in Geocomputation	MU
A12	MA in Geography: Spatial Justice	MU
A13	MSc in Geographic Information Science*	TUD
A14	MSc in Geospatial Data Analysis*	UCD
A15	MSc in Conservation Behaviour*	GMIT
A16	MSc in Environmental Leadership*	NUIG
A17	MA in Environment, Society and Development*	NUIG
A18	MSc in Environmental Science	TCD
A19	MSc in Environmental Science*	UCD
A20	MSc in Environmental Policy*	UCD
A21	MSc (Agr) in Environmental Resource Management*	UCD
A22	MSc in Global Environmental Economics*	NUIG
A23	MSc in Renewable Energy & Environmental Finance*	UCDMS
A24	MSc in World Heritage Management and Conservation*	UCD
A25	MSc in Architecture, Urbanism & Climate Action*	UCD
A26	MSc in Spatial Demography*	UCD
A27	MSc in Urban Design & Planning*	UCD

### **B Engineering and Sustainable Technology**

B1	MSc in Energy Science	TCD
B2	MSc in Sustainable Energy	TCD
B3	MEngSc in Sustainable Energy*	UCC
B4	MSc in Sustainable Energy and Green Technologies*	UCD
B5	MSc in Energy Management*	TUD
B6	ME in Energy Systems Engineering*	NUIG
B7	MSc in Sustainable Energy Engineering*	WIT
B8	MSc in Water Resources Engineering*	NUIG
B9	MSc in Environmental Engineering	TCD

B10	ME in Sustainable Infrastructure*	TUD
B11	MSc in Environmental Technology*	UCD
B12	MEngSc in Water, Waste and Environmental Engineering*	UCD
B13	MSc in Innovative Technology Engineering*	WIT
B14	MEng in Structural Engineering	CIT
B15	MEngSc in Structural Engineering*	UCD
B16	MSc in Mechanical Engineering	TCD
B17	MSc in Transport Engineering, Policy & Planning	TCD

**A**

**Agriculture,  
Rural Development,  
GIS, Environment,  
Climate Change**

**Study Location:** Dublin City University

**Programme Duration:** 1 year

**Programme Outline:** This programme will equip students with critical insights and analytical skills to enable them to play a part in shaping the transition to a decarbonised and climate resilient future. Most postgraduate programmes focused on climate change are concerned with the science of climate change. DCU's new MSc. in Climate Change: Policy, Media & Society is unique in Ireland in its focus on the social sciences and humanities, on media, policy, law, governance, regulation and politics.

**Indicative Content:** Core – Climate Change and the Media; Climate Change: The Physical Science Basis; Climate Change Policy and Governance; Research Methodology; Climate Change and Society Transition; EU and National Climate Change Law; Dissertation. Options – Environmental Ethics: Perspectives and Challenges; Environmental Change and World Politics; Climate Change Education; Policy Challenges; Communicating Policy; EU Foreign and Security Policy; The Politics of the Euro.

**Admission Requirements:** An undergraduate degree in any discipline with a minimum 2:2 or equivalent.

**IELTS:** Minimum 6.5 overall score required with no section less than 6.0.

**Programme Webpage:** [shortened as] <https://bit.ly/2vKLXFs>

**Application:**

**PAC Code: DC669**

Apply online via The Postgraduate Applications Centre (PAC) – [www.pac.ie](http://www.pac.ie) – using the PAC application code shown above.

**Study Location:** Maynooth University

**Programme Duration:** 1 year

**Programme Outline:** This programme aims to provide Graduates with the knowledge, skills and experience necessary to enable them to undertake analysis of both global and Irish related climate change science, impacts and policies. The programme explores ways of meeting the challenges posed by climate change, particularly in the areas of simulating future climates, impacts modelling, developing mitigation and adaptation strategies and decision making under uncertainty.

**Indicative Content:** Applied Climate Sciences; Impacts, Adaptation and Mitigation; Analysing Spatial and Temporal Data Using R; Detection, Attribution and Decision Making; The Ocean and Climate Change; Field Course; Thesis.

**Admission Requirements:** A minimum of Second Class Honours, Grade One (2.1) in any of the following subjects or cognate disciplines: Geography, Physics, Computer Science, Environmental Science, Engineering, Mathematics.

**Programme Webpage:** [shortened as] <https://bit.ly/2IjULdE>

**Application:**

**PAC Code: MHN56**

Apply online via The Postgraduate Applications Centre (PAC) – [www.pac.ie](http://www.pac.ie) – using the PAC application code shown above.



**Study Location:** NUI Galway

**Programme Duration:** 1 year

**Programme Outline:** This programme is aimed at students who want to combine scientific, engineering, technical, social or policy skills so that they are better equipped to understand and make significant contributions regarding the adaptation and mitigation of climate change impacts on global agriculture and food security. Students are provided with the skills and tools for developing agricultural practices, policies and measures to address the challenge that global warming poses for agriculture and food security worldwide.

**Indicative Content:** Climate Change, Agriculture & Global Food Security; Climate Change, Agriculture, Nutrition & Global Health; Policy & Scenarios for Climate Change Adaptation & Mitigation; Gender, Agriculture & Climate Change; Low-Emissions Climate-Smart Agriculture & AgriFood Systems; Climate Change Adaptation, Mitigation & Risk Management; Monitoring Climate Change: Past, Present, Future; Climate Change, Natural Resources & Livelihoods; AgriBiological Responses to Climate Change; CCAFS Science Communication: Techniques & Models; CCAFS Case Studies, Journal Club & Datasets; CCAFS Research Skills/Techniques; CCAFS Research Project.

**Admissions Requirements:** Minimum 2:1 honours degree or equivalent in an appropriate discipline.

**IELTS:** Minimum 6.5 overall score required with no section less than 5.5.

**Programme Webpage:** [www.nuigalway.ie/ccafs](http://www.nuigalway.ie/ccafs)

**Application:** Apply online at <https://nuigalway.elluciancrmrecruit.com/Apply>

**Study Location:** University College Cork

**Programme Duration:** 1 year

**Programme Outline:** This is a unique programme, with a very strong practical emphasis and will equip participants with the organisational and management skills needed to make innovative contributions to the development of local economies, with particular emphasis on co-operatives, social enterprises and food businesses in Ireland and overseas. It is aimed at graduates from a wide range of disciplines who wish to pursue careers in sustainable development and innovative practice leading to positions in the food sector (ranging from local food enterprises to large multi-nationals), local and international rural development, shared and collaborative economy, NGOs, innovative community businesses including co-operatives and social enterprises, local and regional enterprise development, corporate social responsibility, policy formulation and analysis.

**Indicative Content:** Contemporary Socio-Economic and Environmental Issues; Co-operative and Collaborative Responses; Sustainable Rural Development; Economics of Agri-Food Markets; Global Food Policy Issues; Marketing for Sustainable Food Production and Consumption; Food Branding and Digital Media; Project Management; Sustainable Food Systems; Food Supply Chain and Value Analysis; Research Methods; Professional Development; Practice-Based Research Project.

**Admission Requirements:** A minimum 2:2 degree or equivalent, in a wide range of disciplines.

**IELTS:** Minimum 6.5 overall score required with no individual section lower than 5.5.

**Programme Webpage:** <https://www.ucc.ie/en/ckl03/>

**Application:**

**PAC Code: CKL03**

Apply online via The Postgraduate Applications Centre (PAC) – [www.pac.ie](http://www.pac.ie) – using the PAC application code shown above. *Additional application information is posted on the programme webpage.*

**A5 MSc in Food Security Policy and Management\***

**UCC**

**Study Location:** University College Cork

**Programme Duration:** 1 year

**Programme Outline:** This programme is designed to equip recent graduates and professionals with the knowledge, skills and competencies needed to work in the field of food security, particularly policy and programme management. The programme aims to provide students with skills that can be applied particularly in the areas of project and programme management, policy development and implementation, and impact assessment of programmes aimed at improving food security and dietary quality. The programme is open to students from a wide range of backgrounds, including economics, nutrition, food security, international development, humanitarian assistance and programme management.

**Indicative Content:** Sustainable Food Systems; Advanced Food Security Theory, Practice and Analysis; Rural Development, Gender and Livelihoods; Economics of Agri-Food Markets and Value Chain Analysis; Health Information Systems and e-Health Analysis; Programme Planning and Impact Assessment; Research Methods; Food Security in Humanitarian Crises; Programme Planning and Impact Assessment; Public Health Nutrition: From Principles to Practice; Global Food Policy Issues; Applied Food Security Research Project.

**Admission Requirements:** At least a 2H2 in their primary degree, or equivalent in a relevant subject. Consideration may be given to applicants who do not hold a second class honours degree but who have at least five years general professional experience in a relevant field or three years managerial/specialist experience, subject to approval of the Programme Director and the Head of the College of Business & Law.

**IELTS:** Minimum 6.5 overall score required with no individual section lower than 6.0.

**Programme Webpage:** <https://www.ucc.ie/en/ckl04/>

**Application:**

**PAC Code: CKL04**

Apply online via The Postgraduate Applications Centre (PAC) – [www.pac.ie](http://www.pac.ie) – using the PAC application code shown above. *Additional application information is posted on the programme webpage.*

**A6 MSc (Agr) in Sustainable Agriculture and Rural Development\***

**UCD**

**Study Location:** University College Dublin

**Programme Duration:** 1 year

**Programme Outline:** This programme represents a return to core values in the development of rural areas which are rooted in agricultural change as well as responding to new societal demands such as safe and ethically produced food, a healthier environment and sustainable and affordable energy. The programme will equip graduates with capabilities in core analytical, conceptual, communications and research skills as well as providing the knowledge base required to develop careers in the broad arena of sustainable agriculture and rural development.

**Indicative Content:** Core - Sustainable Agriculture; Strategic Communications; Policies and Strategies for Sustainable Agriculture and Rural Development; Research Methods; Theory & Practice of Rural Enterprises; Minor Thesis. Options - World Heritage and Sustainable Development; Global Biodiversity and Heritage; Economics and Sociology in Rural Development; Planning for Development; Agricultural Extension and Innovation.

**Admission Requirements:** A minimum 2:2 Honours university degree.

**IELTS:** Minimum 6.5 overall score required with no individual section lower than 6.0.

**Programme Webpages:** [shortened as] <http://bit.ly/2thpPm8>

**Application:** Apply online from programme webpage.

<b>A7</b>	<b>MSc in Applied Marine Conservation*</b>	<b>GMIT</b>
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**Study Location:** Galway-Mayo Institute of Technology

**Programme Duration:** 1 year

**Programme Outline:** One-year taught MSc degree focusing on fisheries, marine conservation, sustainability and ecosystem based management.

**Indicative Content:** Ecology of Top Predators in Marine Systems; Secondary Impacts of Harvest on Wild Populations and Ecosystems; Applied Geographic Information Systems; Data Analysis Using R and R Studio; Thesis; Seabird and Marine Mammal Population Assessment techniques; Life History Strategies and Trade-Offs.

**Admission Requirements:** The minimum requirement is a 2:2 in a cognate Honours Degree, e.g. Zoology, Ecology, Marine Biology, Wildlife Management, Conservation Biology.

**IELTS:** Minimum 6.0 overall score required with no section less than 6.0.

**Programme Webpage:** [shortened as] <http://bit.ly/2xkKLdu>

**Application:** Apply via an online application form available at <https://www.gmit.ie/international/international-online-applications>

<b>A8</b>	<b>MSc in Coastal &amp; Marine Environments: Physical Processes, Policy &amp; Practice*</b>	<b>NUIG</b>
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**Study Location:** NUI Galway

**Programme Duration:** 1 year

**Programme Outline:** Coastal and marine environments are critical to local and national economies, support diverse habitats and communities, and provide a suite of ecosystem services. This field-intensive postgraduate programme examines emerging disprogrammes surrounding the long-term health, use, and management of coastal and marine systems.

**Indicative Content:** Core – Field and Laboratory Methods; Coastal Processes and Landforms; Marine Spatial Planning and Policy; Dissertation. Options –Biodiversity and Coastal Change; Quaternary Coastal Change; Geographic Studies Abroad; Environment and Health; Geographic Research and Dissertation Abroad.

**Admissions Requirements:** Second Class Honours or Equivalent (+3.0 GPA). Selection is based on a review of candidate's academic record at the undergraduate level, professional interests and goals, and level of relevant experience.

**IELTS:** Minimum 6.5 overall score required with no section less than 5.5.

**Programme Webpage:** [shortened as] <https://bit.ly/2YnEcES>

**Application:** Apply online at <https://nuigalway.elluciancrmrecruit.com/Apply>

**A9 MSc in Applied Coastal and Marine Management\***

**UCC**

**Study Location:** University College Cork

**Programme Duration:** 1 year

**Programme Outline:** The programme focuses on the science (including the social sciences) of Coastal and Marine management and policy-making today. It is designed to give students professional competency to make sound, scientifically-informed, strategic and operational decisions regarding the sustainable governance, use and protection of coastal and marine environments. It also provides training in applied practical skills, with an emphasis on geospatial techniques relevant to coastal and marine data capture, analysis, integration and visualisation. Students will also receive training in important transferrable skills including principles and practice of scientific research, effective communication and presentation techniques, and sound project management

**Indicative Content:** Marine Ecology and Conservation; Introduction to Geographical Information Systems; Introduction to Remote Sensing; Coastal and Marine Resource Use Practices; Coastal and Marine Governance; Coastal and Marine Processes; Practical Offshore Geological Exploration; Research Dissertation.

**Admission Requirements:** A primary degree to upper second class honours level (2:1 grade) or higher from a recognised third-level institution in Geography, Geology, Environmental Sciences, Biology, Oceanography, Physics, Mathematics, Engineering or a related discipline. Applications will also be considered from graduates in other disciplines, including those in the Arts and Social Sciences, who have a demonstrable interest and/or experience in coastal and marine management, and who can offer sufficient numerical abilities. Applicants with a degree of at least lower second class honours (2:2 grade), or its equivalent, in one of the areas mentioned above, plus at least five years of work experience relevant to the field of applied coastal and marine management will also be considered.

**IELTS:** Minimum 6.5 overall score required with no individual section lower than 6.0.

**Programme Webpage:** <https://www.ucc.ie/en/cke39/>

**Application:**

Apply online via The Postgraduate Applications Centre (PAC) – [www.pac.ie](http://www.pac.ie) – using the PAC application code shown above.

**PAC Code: CKE39**

**Study Location:** Maynooth University

**Programme Duration:** 1 year

**Programme Outline:** This programme aims to provide highly qualified, motivated graduates who have been trained in Geographical Information Systems, Remote Sensing and Digital Image Processing and who can apply the information technology skills they obtain; to produce marketable graduates who will make significant contributions to GIS and RS application areas including; industry, government, academia, the community and voluntary sector and other public and private bodies; to provide an understanding of Geographical Information Systems and Remote Sensing, the technology involved and its applications for specific investigations.

**Indicative Content:** Introduction to Geographical Information Systems and Science; Theoretical Remote Sensing; Structured Programming; Spatial Databases; Analysing Spatial and Temporal Data using R; Digital Image Processing & Advanced Remote Sensing; Work Placement; Geographical Information Science in Practice.

**Admission Requirements:** The basic entry requirement is a degree with a minimum of Second Class Honours (2:1) or equivalent in any of the following subjects: Geography, Planning; Physics; Computer Science; Environmental Science; Geology; Mathematics; Engineering; Geophysics; Public Administration; Public Health or a cognate discipline.

**Programme Webpage:** [shortened as] <http://bit.ly/2uOy7Da>

**Application:**

**PAC Code: MHN58**

Apply online via The Postgraduate Applications Centre (PAC) – [www.pac.ie](http://www.pac.ie) – using the PAC application code shown above.

**Study Location:** Maynooth University

**Programme Duration:** 1 year

**Programme Outline:** This programme aims to provide a sound theoretical and practical foundation in geocomputation for numerate graduates with suitable backgrounds in subjects such as mathematics, engineering, geography, computer science, geomatics, and mining, and professionals working in cognate disciplines. The programme will provide students with a sound understanding of the theoretical principles underlying geocomputation. Students will gain a sound understanding of the practical aspects of Geographical Information System software and management.

**Indicative Content:** Structured Programming; Spatial Databases; Theoretical Remote Sensing; Geographic Information Science in Practise; Introduction to Geocomputation; Advanced Topics in Geocomputation; Object-Oriented Programming; Methods & Techniques in Geocomputation; Dissertation.

**Admission Requirements:** A minimum 2.1 honours degree or equivalent in a cognate discipline. Cognate disciplines include, but are not limited to: geography, computer science, geomatics, mining, engineering, mathematics. Applicants must have a recognised primary degree which is considered equivalent to Irish university primary degree level.

**Programme Webpage:** [shortened as] <http://bit.ly/2v7zpo7>

**Application:****PAC Code: MH50B**

Apply online via The Postgraduate Applications Centre (PAC) – [www.pac.ie](http://www.pac.ie) – using the PAC application code shown above.

**A12 MA in Geography: Spatial Justice****MU****Study Location:** Maynooth University**Programme Duration:** 1 year

**Programme Outline:** The 'MA Geography: Spatial Justice' offers a wide-ranging programme of taught modules, delivered through lectures, seminars, fieldwork, practicals and civil society partnerships, with an emphasis on teaching and learning informed by participatory action research.

**Indicative Content:** Core – Anthropology and Development; Public Engagement and Spatial Justice; Field School; Spatial Justice: Geographies of Social & Environmental Change; Thesis. Options – Critical Ecologies; Global Environmental Change; Introduction to Geographical Information Systems and Science; Advanced Studies in Human Geography; Gender, Sexuality and Law: Comparative Perspectives; Irish Media History; Qualitative Methods; Foundations of Medical Anthropology; Ethnography Winter School; Topics in Medical Anthropology; Anthropology of Digital Media; Immigration and Diversity in Higher Education; Environmental Remote Sensing; Quantitative Research Methods.

**Admission Requirements:** Students should normally have earned a 2.1 or above in Geography (either subject degree in Geography or overall) or related disciplines. A personal statement is required so the Director can give consideration to applicants with relevant academic, work or professional experience if coming from a different background than the social sciences and/or if earned a 2.2 mark.

**Programme Webpage:** [shortened as] <https://bit.ly/3evC95t>

**Application:****PAC Code: MHN66**

Apply online via The Postgraduate Applications Centre (PAC) – [www.pac.ie](http://www.pac.ie) – using the PAC application code shown above.

**A13 MSc in Geographic Information Science\*****TUD****Study Location:** Technological University Dublin (Bolton Street Campus)**Programme Duration:** 1 year

**Programme Outline:** Competency in information technology skills has consistently been identified as a critical need in the geospatial industry and in the wider workplace in Ireland. This programme has been designed specifically to address these issues and will provide graduates with a thorough grounding in information technology including spatial databases and web technology as well as programming skills tailored to the particular requirements of geospatial data.

**Indicative Content:** Fundamentals of GIS; Spatial Data Acquisition; GI Project Management; Web and User Interface Design; Spatial Databases; Introduction to Programming; Advanced GIS; GIS Modelling; Work Placement; Web GIS; Programming for GIS; Advanced Spatial Data Management; Research Project and Dissertation.

**Admission Requirements:** To be admitted to the programme, students should have a minimum of a 2.2 in an honours bachelor degree. Applications from candidates who have an equivalent qualification at honours level (for example, a professional qualification) will also be considered.

**IELTS:** Minimum 6.5 overall score required with no section less than 6.0.

**Programme Webpage:** [shortened as] <https://bit.ly/30WqN4m>

**Application:** Apply via programme webpage.

#### **A14 MSc in Geospatial Data Analysis\***

**UCD**

**Study Location:** University College Dublin

**Programme Duration:** 1 year

**Programme Outline:** The MSc in Geospatial Data 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.

**Indicative Content:** Core – Research Design; Dissertation; Introduction to ArcGIS; Advanced GIS; Remote Sensing. Options – Introduction to GIS and Spatial Methods in Archaeology; Critical Geopolitics of Europe; Development of the Global South; Global South Fieldwork: Vietnam; Practical Environment Assessment; Population Patterns and Challenges; Coastal Risks; INFOMAR Marine Seabed Data; INFOMAR Marine Survey Data; Health Care Crises; Social Simulation: Methods and Models.

**Admission Requirements:** Applications are welcome from graduates from any discipline, though undergraduate disciplines with a thematic link to e.g. Geography, Geology, Environmental Sciences, Computer Science, Physics, Maths, Engineering or a cognate discipline may be advantageous. The programme would also be suitable for those with a professional background in related fields who might wish to develop and broaden their skillset.

**IELTS:** Minimum 6.5 overall score required with no individual section lower than 6.0.

**Programme Webpage:** [shortened as] <https://bit.ly/3eF46b8>

**Application:** Apply online from programme webpage.

#### **A15 MSc in Conservation Behaviour \***

**GMIT**

**Study Location:** Galway-Mayo Institute of Technology

**Programme Duration:** 1 year

**Programme Outline:** This one-year MSc degree focuses on how animal behaviour can be applied to wildlife conservation. You will study the behaviour of a wide range of species from marine, freshwater and terrestrial habitats, and you will learn how an understanding of animal behaviour can contribute to the conservation and management of those species. You will acquire a range of applied skills, such as camera trap surveying for terrestrial mammals, visual and acoustic monitoring of marine mammals, abundance estimation of marine

mammals using mark-recapture and DISTANCE, geographic information systems (GIS), and data analysis using R and RStudio.

**Indicative Content:** Studies in Conservation Behaviour; Data Analysis using R and RStudio; Residential Field Programme; Applied Geographic Information Systems; Animal Behaviour: Recording and Analysis; Acoustic Monitoring as a Marine Conservation Tool; Research Thesis.

**Admission Requirements:** The minimum requirement is a 2:2 in a cognate Honours Degree, e.g. Animal Behaviour, Conservation Biology, Zoology, Ecology, Environmental Science, etc.

**IELTS:** Minimum 6.0 overall score required with no section less than 6.0.

**Programme Webpage:** [shortened as] <https://bit.ly/2BtQeCo>

**Application:** Apply via an online application form available at <https://www.gmit.ie/international/international-online-applications>

## **A16 MSc in Environmental Leadership\***

**NUIG**

**Study Location:** NUI Galway

**Programme Duration:** 1 year

**Programme Outline:** The MSc in Environmental Leadership will equip graduates with an advanced level of knowledge and problem-solving, management and communication skills in key areas relevant to the environment, marine and energy sectors. It will equip them with a capacity and capability for environmental leadership relevant to their career trajectory.

**Indicative Content:** Core – Environmental Problems & Solutions; Project Management; Natural Resource Governance; Research Methods 1 and 2; Communication Science & Research; Introduction to Statistics and Data Analysis; Research Project. Options – Conceptualising Environment Society & Development; Environment & Human Health; Environmental Impact Assessment; Marine Spatial Planning & Policy; Introduction to Practical GIS; Introduction to Oceanographic and Environmental Data Analysis; Climate Change & Biodiversity.

**Admission Requirements:** Minimum 2:2 primary degree or its equivalent in an appropriate discipline, including Science, Geography and Social Science.

**IELTS:** Minimum 6.5 overall score required with no section less than 5.5.

**Programme Webpage:** [shortened as] <https://bit.ly/2SHFN3b>

**Application:** Apply online at <https://nuigalway.elluciancrmrecruit.com/Apply>

## **A17 MA in Environment, Society and Development\***

**NUIG**

**Study Location:** NUI Galway

**Programme Duration:** 1 year

**Programme Outline:** The programme engages students on global concerns that encompass a complex and dynamic mesh of environmental, social and economic processes. It centrally involves a critique of interventionism



and the various practices of development and security that define our contemporary world, and practically how that critique can enable more informed and potentially more transformative interventionary practices.

**Indicative Content:** Core – Conceptualising Environment, Society & Development; Geography and Geo-Graphing; Geopolitics & Security; Environment & Risk; Managing Development; Field Based Learning; Dissertation. Options – Geographic Studies Abroad; Geographic Research and Dissertation Abroad.

**Admission Requirements:** Second Class Honours degree with a 2:1 in Geography or related discipline and a 2:2 overall, or equivalent. Prior learning in terms of relevant work experience is also recognised.

**IELTS:** Minimum 6.5 overall score required with no section less than 5.5.

**Programme Webpage:** [shortened as] [www.bit.ly/cG6CnV](http://www.bit.ly/cG6CnV)

**Application:** Apply online at <https://nuigalway.elluciancrmrecruit.com/Apply>

**A18 MSc in Environmental Science**

**TCD**

**Study Location:** Trinity College Dublin

**Programme Duration:** 1 year

**Programme Outline:** This full-time, intensive programme is intended for administrative and scientific workers and new graduates with an appropriate environmental science related background, although applications from graduates with different backgrounds are also welcomed. The programme provides a foundation of understanding of current environmental policies and legislation, and builds upon this with practical and theoretical programmes that include subjects such as ocean and coastal management, water resources and pollution, climate change and environmental impact assessment.

**Indicative Content:** Introduction to environmental science; Environmental and chemical analysis; Hydrology and Groundwater quality; Earth system science I: Deep time; Earth system science II: Environmental and climate change; Environmental policies. Practical skills modules: Data handling and analysis; Practical environmental skills. Project Modules: Individual desk study; Project planning; Individual research project.

**Admission Requirements:** First or upper second class honours degrees, or their overseas equivalent, awarded by recognised universities, institutions and degree awarding bodies; or holders of other degrees or relevant qualifications including professional qualifications, who have at least three years' work experience in an environmental profession.

**Programme Webpage:** <https://naturalscience.tcd.ie/postgraduate/msc-envirsci/>

**Application:** Apply online via the programme webpage.

**Study Location:** University College Dublin

**Programme Duration:** 1 year

**Programme Outline:** This programme provides graduates with a thorough knowledge of Environmental Science and there is a heavy emphasis on practical training in fieldwork, laboratory analyses, information sourcing, data analysis, planning, reporting and communication. A work placement in an agency servicing the environmental sector is undertaken during the third semester obtaining industry relevant skills.

**Indicative Content:** Core – Soil Ecology; Quantitative Tools for the Life Sciences; Introduction to Water Resource Engineering; Freshwater Resources Assessment; Global Change Ecology; Thesis; Vegetation Ecology; G.I.S.; Environmental Geology. Options – Wildlife Conservation; Remote Sensing; Waste Management; Water Waste and Environmental Modelling; Integrated Municipal Solid Waste; Marine Community Ecology; Environmental Impact Assessment; Ecotoxicology and Air Quality; Ecological Modelling; Analyses for Environmental Investigations; Field-Based Freshwater Fisheries Investigations.

**Admission Requirements:** This programme is intended for applicants with a primary degree in Science, Engineering, Geography, Architecture or a related subject. An upper second class honours, or international equivalent is required.

**IELTS:** Minimum 6.5 overall score required with no individual section lower than 6.0.

**Programme Webpage:** [shortened as] [www.bit.ly/2c1YgQN](http://www.bit.ly/2c1YgQN)

**Application:** Apply online from programme webpage.

**Study Location:** University College Dublin

**Programme Duration:** 1 year

**Programme Outline:** The programme takes an international perspective on environmental issues and explores the increasingly complex environmental challenges that societies and governments face across the globe, addressing contemporary environmental debates such as Climate Change, Water Policy, Energy Security and Sustainability, and Urban Resilience. Teaching is focused on areas and skills within environmental policy-making, and an integrated group-project module provides practice-based insights into the policy-making process. Students can enhance their own specialist research interests during the completion of a thesis or internship in the third trimester.

**Indicative Content:** Core – Tools for Sustainable Development; Environmental Economics & Climate Policy; Research for Environmental Policy; European Environmental Policy; Applications of Environmental Policy; Environmental Risk & Behaviour. Options – Environmental Policy Thesis; Internship – Research Project.

**Admission Requirements:** An honours undergraduate degree with a minimum upper second class honours or international equivalence is required

**IELTS:** Minimum 6.5 overall score required with no individual section lower than 6.0.

**Programme Webpage:** [shortened as] <https://bit.ly/2OxyBFj>

**Application:** Apply online from programme webpage.

**A21 MSc (Agr) in Environmental Resource Management\***

**UCD**

**Study Location:** University College Dublin

**Programme Duration:** 1 year

**Programme Outline:** The MSc in Environmental Resource Management is an established programme that develops graduates with the flexible combination of environmental science, policy and management expertise necessary to address these needs. The programme is accessible to candidates from a very broad range of primary degree backgrounds. Graduates from this programme respond to many of the major global sustainability challenges.

**Indicative Content:** Core – Data Analysis for Biologists; Research Project (AESC); Human Impact on the Environment; Seminar Presentation; Soil, Plant & Water Resources; Geographic Information Systems; Biodiversity and Ecosystem Services; Literature Review (AESC); Practice Research Skills; Ecological Modelling. Options – Wildlife Conservation; One Health; Rural Planning & Environmental Law.

**Admission Requirements:** Applicants must hold minimum Lower Second Class Honours Degree in Biological Science, Environmental Science, Agricultural Science, Geography, Earth Sciences, Natural Sciences or cognate degree programme from a recognised higher education institution. Cognate degree programmes would include humanities, arts, business, law and engineering.

**IELTS:** Minimum 6.5 overall score required with no individual section lower than 6.0.

**Programme Webpage:** [shortened as] [www.bit.ly/2c3C2mu](http://www.bit.ly/2c3C2mu)

**Application:** Apply online from programme webpage.

**A22 MSc in Global Environmental Economics\***

**NUIG**

**Study Location:** NUI Galway

**Programme Duration:** 1 year

**Programme Outline:** The programme is specifically targeted to provide students with employability skills that are relevant to shape and influence future public policy, conduct environmental evaluations, lead research projects, work in a business or consultancy role, with international development and aid agencies or continue education through further academic study. The programme consists of taught modules, an internship, and a minor dissertation which is usually closely linked to the internship.

**Indicative Content:** Core – Microeconomic Theory; Econometrics; Natural Resource Governance and Sustainability; Climate Change Economics; Cost-Benefit Analysis and Evaluation; Environmental Economic Modelling; Global Issues in Agricultural, Marine and Renewable Energy Economics; Dissertation. Options – Renewable Energy Economics and Policy; Innovation and Management; Social Marketing and Environmental Sustainability; Business Analytics with SAP.

**Admission Requirements:** Students with a primary degree with Second Class Honours, Grade 1 or equivalent, which will have included the study of Economics can apply.

**IELTS:** Minimum 6.5 overall score required with no section less than 5.5.

**Programme Webpage:** [shortened as] <https://bit.ly/2YysLGy>

**Application:** Apply online at <https://nuigalway.elluciancrmrecruit.com/Apply>

**A23 MSc in Renewable Energy & Environmental Finance\***

**UCDMS**

**Study Location:** University College Dublin, Michael Smurfit Business School

**Programme Duration:** 1 year

**Programme Outline:** As the only Masters in the world covering both energy finance and environmental finance, this programme offers an unrivalled level of specialisation in global energy and environmental markets. The curriculum encompasses the major theoretical aspects of energy and the environment in economics and finance, along with modules focusing upon the tools and techniques for evaluating a comprehensive range of global and regional energy-environment issues.

**Indicative Content:** Core – Quantitative Methods for Finance; Financial Econometrics; Capital Markets and Instruments; Commodity Finance; Financial Theory; Financial Analysis; Environmental Finance; Electricity Markets; Energy Economics and Policy; Green Business; Portfolio and Risk Management. Options – Mergers and Acquisitions; Financial Modelling; Advanced Treasury Management; Aircraft Financing; Behavioural Finance; International Finance; Applied Investment Management; Research Project.

**Admission Requirements:** Minimum 2:1 undergraduate degree in (i) Business/Commerce including quantitative subjects such as Economics, Finance or Accounting; or (ii) a Finance-related area, Mathematical Finance, Economics, Mathematics, Statistics, Environmental Science, Science, Computer Science, Engineering or Physics. Applicants should have demonstrated strong academic ability (a 1.1 or 2:1) in a number of quantitative modules in their degree, such as Mathematics, Statistics, or Econometrics. Candidates may be asked to sit the Graduate Management Admissions Test (GMAT).

**IELTS:** Minimum 7.0 overall score required with no section less than 6.0.

**Programme Webpage:** [shortened as] <https://bit.ly/2AQedeu>

**Application:** Apply online via the programme webpage.

**A24 MSc in World Heritage Management and Conservation\***

**UCD**

**Study Location:** University College Dublin

**Programme Duration:** 1 year

**Programme Outline:** The UCD Masters Programme in World Heritage Management provides graduates with a thorough knowledge of the World Heritage Convention and its application in solving heritage conservation problems. The programme is designed to accommodate applicants with a variety of academic qualifications including Archaeology, Architecture, Geography, Biology, Arts, Agriculture, Engineering and Economics. \*Please note that the standard two year MSc will be adapted as a 16 month programme for Irish Aid Fellowship recipients.

**Indicative Content:** Core – Communicating Heritage; Research Project Skills; Cultural Heritage; International Strategies and the World Heritage Convention; Heritage Marketing, Market Research & Management; World Heritage and Sustainable Development; Conflict Resolution & Conservation; Dissertation. Options – Archaeology & WHM in Ireland; Irish Archaeological Landscapes; Ireland Landscapes: Future Views; Conservation Biology; Global Biodiversity and Heritage; Climate Change & the Environment; Remote Sensing; Historical Landscapes; Creative Thinking & Innovation.

**Admission Requirements:** A minimum of a lower second class honours degree or the international equivalent. Applicants with diverse academic backgrounds including Archaeology, Architecture, Geography, Biology, Arts, Agriculture, Engineering and Economics will be considered.

**IELTS:** Minimum 6.5 overall score required with no individual section lower than 6.0.

**Programme Webpage:** [shortened as] [www.bit.ly/2c3BVaw](http://www.bit.ly/2c3BVaw)

**Application:** Apply online from programme webpage.

**A25 MSc in Architecture, Urbanism & Climate Action\***

**UCD**

**Study Location:** University College Dublin

**Programme Duration:** 1 year

**Programme Outline:** The MSc programme equips graduates and returning professionals with specialist skills to respond to the challenge of planning, designing, and actioning a sustainable built environment. The School of Architecture, Planning and Environmental Policy (APEP) brings together four key disciplines to provide a unique graduate learning experience. Core modules are specifically designed to enhance knowledge of Sustainable Development Goals, climate science and policy as well as skills for sustainable building and urban design.

**Indicative Content:** Core – Introduction to Urban Design; Architecture & Climate Change; Linked Research Project; Carbon Management and Sustainable Urbanism; Research for Environmental Policy; Geographical Information Systems for Policy and Planning. Options – Building Renovation and Energy Retrofit; Realising Built Projects; Architectural Design; Urban Design Theory; Postgraduate Studio; Urban Design Studio; Agency: Design/Build; Computational Design; Irish Timber & Sustainability; Intro to Building Construction; Advanced Air Pollution; Energy System & Sustainable Environments; Introduction to Transportation and Traffic Engineering; Tools for Sustainable Development; Environmental Economics & Climate Policy; European Environmental Policy; Climate Politics and Policy; Climate Politics and Policy; Reimagining Dublin: An Interdisciplinary Exploration in Urban Regeneration; Remote Sensing; Natural Hazards and Risk; Planning, Society and Diversity; Urban and Regional Development; Environmental Assessment; Work Placement; Industry-Collaborative Research Project; Individual Research Project.

**Admission Requirements:** Undergraduate degree (GPA 3.08) in subjects related to the built environment including architecture, urban design, engineering, environmental sciences, or humanity degrees involving social or natural sciences.

**IELTS:** Minimum 6.5 overall score required with no individual section lower than 6.0.

**Programme Webpage:** [shortened as] <https://bit.ly/3fHKDlo>

**Application:** Apply online from programme webpage.

**Study Location:** University College Dublin

**Programme Duration:** 1 year

**Programme Outline:** The interdisciplinary programme provides students with an opportunity to study population issues in a research-led environment, with a focus on applying learning to real-world scenarios. Upon graduation, students will have the technical and substantive know-how to fill a large and important gap in an increasingly competitive global economy.

**Indicative Content:** Information Visualisation; Demography Dissertation; Introduction to ArcGIS; Advanced GIS; Population Patterns and Challenges; Introduction to Epidemiology, Biostatistics & Public Health; Demographic Analytics: Theory and Applications; Research Design; Data Programming with R.

**Admission Requirements:** This programme is intended for applicants who hold a primary degree in a relevant discipline, including political science, social policy, geography, sociology, economics, mathematics, statistics, development studies, business, finance, marketing, public health, psychology and computer science. An upper second class honours degree (2H1), or international equivalent is required.

**IELTS:** Minimum 6.5 overall score required with no individual section lower than 6.0.

**Programme Webpage:** [https://sisweb.ucd.ie/usis/!W\\_HU\\_MENU.P\\_PUBLISH?p\\_tag=MODULES&MAJR=W482](https://sisweb.ucd.ie/usis/!W_HU_MENU.P_PUBLISH?p_tag=MODULES&MAJR=W482)

**Application:** Apply online from programme webpage.

**Study Location:** University College Dublin

**Programme Duration:** 1 year

**Programme Outline:** This Master's programme is focused on the role of urban design in the context of urban planning, and is delivered with an emphasis on the distinct methodologies, professional perspectives and pedagogies of that discipline. It provides specialist knowledge and skills in urban design theory and practice, urban conservation; nature-based solutions, and the role of research in design. The programme will enable graduates to work as part of a multidisciplinary team to create better places through urban design. Students will also have the opportunity to draw upon the School's research expertise to place urban design centre stage in tackling a range of pressing environmental and other issues.

**Indicative Content:** Core – Conservation History, Theory and Policy; Postgraduate Studio; Urban Design Studio; Nature-Based Solutions; Research Design & Methods. Options – Research and Innovation in the Design Environment; Planning Law APEP; Placemaking: Urban and Rural Design; Housing Policy and Planning; Economic and Property Markets; Comparative Planning; Design Thesis; Thesis.

**Admission Requirements:** An honours undergraduate degree with minimum 2.1 award or international equivalent in a cognate discipline, including architecture and landscape architecture planning, geography, anthropology, sociology, environmental studies, engineering, property economics, surveying, politics, social science, and law.

**IELTS:** Minimum 6.5 overall score required with no individual section lower than 6.0.

**Programme Webpage:** [https://sisweb.ucd.ie/isis/!W\\_HU\\_MENU.P\\_PUBLISH?p\\_tag=PROG&MAJR=W332](https://sisweb.ucd.ie/isis/!W_HU_MENU.P_PUBLISH?p_tag=PROG&MAJR=W332)

**Application:** Apply online from programme webpage.

**B**

**Engineering and  
Sustainable Technology**



**Study Location:** Trinity College Dublin

**Programme Duration:** 1 year

**Programme Outline:** The MSc in Science of Energy consists of six taught modules. These are structured around a **cross-cutting introductory module**. The introductory module is designed to furnish students with all of the basic physics, chemistry and engineering concepts that are required to become an "Energy Scientist". Now with the ability to understand and analyse the competing aspects of all of the essential science, engineering and economics pertinent to the energy discipline, the students proceed to five specialised technically orientated core modules.

**Indicative Content:** Introduction to Energy Science; Conventional Energy Sources and Technologies; Electric Power Generation and Distribution; Sustainable Energy Sources and Technologies; Sustainable Energy Sources and Technologies.

**Admission Requirements:** This MSc is suitable for graduates who have achieved an upper second class honours degree or the international equivalent in either a physical science, earth science or engineering subject. However, applications from similarly qualified candidates from other disciplines are welcome if they can demonstrate a sufficient level of knowledge or interest in the Energy sector.

**Programme Webpage:** <http://www.tcd.ie/programmes/energyscience/>

**Application:** Apply online via programme webpage.

**Study Location:** Trinity College Dublin

**Programme Duration:** 1 year

**Programme Outline:** The MSc in Sustainable Energy is designed to provide engineers, and other suitably qualified graduates with a specialist understanding of energy management as well as sustainable energy generation. The programme will advance your knowledge in efficiency techniques, sustainable energy technologies and energy management systems and strategies. It also includes theory and practice along with economics, management, current legal requirements and standards.

**Indicative Content:** Civil Engineering Management; Research Methodology; Research Dissertation; Wind Energy; Solar Energy Conversion and Applications; Building Energy Physics and Control; Energy Policy and Demand; Renewable Heat; Wave & Hydro Energy.

**Admission Requirements:** An upper second honours degree (or equivalent) in a Civil Engineering or related degree. Relevant industrial experience may be taken into account in allocating places where the programme is oversubscribed.

**Programme Webpage:** <https://www.tcd.ie/civileng/msc-in-sustainable-energy-engineering/>

**Application:** Apply online via programme webpage.

**Study Location:** University College Cork

**Programme Duration:** 1 year

**Programme Outline:** This programme aims to equip students with the information base and skill set to actively participate in this growing global market where energy/environment policy and technological innovation meet. It will provide students with knowledge and understanding of: (i) energy trends, their impacts on the environment and the engineering solutions to mitigate the damage; (ii) engineering of individual renewable energy sources of wind, hydro, biomass, wave, solar and geothermal; (iii) energy conversion processes for electrical, thermal and transport energy supply; (iv) the integration of intermittent renewable energy with the electricity network; (v) sustainable energy end use in building design, construction and management.

**Indicative Content:** Sustainable Energy; Solar and Geothermal Energy; Electrical Power System; Energy in Buildings; Energy Systems in Buildings; Wind Energy; Energy Systems Modelling; Biomass Energy; Photovoltaic Systems; Control Engineering; The Engineer in Society; Ocean Energy; Biomass Energy; Power Electronic Systems; Preliminary Research Project; Dissertation.

**Admission Requirements:** Minimum 2:2 Honours BE or BEng Degree. Candidates with equivalent academic qualifications and suitable experience may be accepted.

**IELTS:** Minimum 6.5 overall score required with no section less than 6.0.

**Programme Webpage:** <https://www.ucc.ie/en/ckr26/>

**Application:**

**PAC Code: CKR26**

Apply online via The Postgraduate Applications Centre (PAC) – [www.pac.ie](http://www.pac.ie) – using the PAC application code shown above.

**Study Location:** University College Dublin

**Programme Duration:** 1 year

**Programme Outline:** The MSc in Sustainable Energy and Green Technologies focuses development and optimisation of renewable energy resource exploitation; efficiency in energy generation and utilisation pathway; mitigation of environmental impacts, and; preparation for business innovation and job creations opportunities in renewable energy systems technologies development, plant biotechnology and entrepreneurship.

**Indicative Content:** The Bioeconomy: A Strategy for Sustainable Fuel, Material and Chemical Production; Life Cycle Assessment; Thesis; Advanced Air Pollution; Waste to Energy Processes & Technologies; Energy Systems Integration; LCA Applications; Research and Teaching Methods; Biorefinery Process & Tech; Energy Systems & Sustainable Environments.

**Admission Requirements:** An honours undergraduate degree with a minimum upper second class honours or international equivalence in an engineering, physical science or environmental related degree.

**IELTS:** Minimum 6.5 overall score required with no individual section lower than 6.0.

**Programme Webpage:** [shortened as] <https://bit.ly/3fK5uL8>

**Application:** Apply online from programme webpage.

**B5 MSc in Energy Management\***

**TUD**

**Study Location:** Technological University Dublin (Grangegorman Campus)

**Programme Duration:** 1 year

**Programme Outline:** The programme will enhance the present and future effectiveness of managers, engineers and scientists by providing an opportunity to study the theory and practice of current developments, laws, standards, technologies, management, economics and finance, associated with European energy and environmental issues. Graduates from the programme will be effective managers of environmental technology with an in-depth awareness of resource management under financial and environmental constraints.

**Indicative Content:** Core – Business (Organisational Behaviour); Law (Business Law); Financial Decision Making; Energy Supply; Energy Conversion and Use; Energy Management Principles and Practice; Research Methodologies; Dissertation. Options - Business (Strategic Management); Law (Energy & Environment Law and Policy); Financial Management; Wind Energy for Electricity Supply; Advanced Energy Systems; Sustainable Building Design; Power System Analysis; Embedded Generation; Renewable Energy Technologies; Biomass Technology / Bio fuels for Transport; Energy Control Systems; Low Energy Lighting Design.

**Admission Requirements:** At least a 2.2 award in an Honours Bachelor of Engineering Degree.

**IELTS:** Minimum 6.5 overall score required with no section less than 6.0.

**Programme Webpage:** [shortened as] <https://bit.ly/30e10FL>

**Application:** Apply via programme webpage.

**B6 ME in Energy Systems Engineering\***

**NUIG**

**Study Location:** NUI Galway

**Programme Duration:** 1 year

**Programme Outline:** This programme aims to advance students' engineering knowledge. It provides training in advanced technologies in energy systems engineering, transferrable skills for employment and/or a research career in the energy sector, and technology development through an energy systems engineering project.

**Indicative Content:** Core – Global Change; Renewable Energy Economics and Policy; Energy Systems Engineering Project. Options – Systems Modelling and Simulation; Project Management; Lean Systems; Computing Architecture & Operating Systems; Advanced Energy Systems Engineering; Programming; Research Methods for Engineers; Computational Methods in Engineering Analysis; Technology Innovation & Entrepreneurship; Financial Management; Databases; Advanced Mechanics of Materials; Design of Sustainable Environmental System; Advanced Mechanical Analysis and Design; Advanced Finite Element Methods; Combustion Science and Engineering; Energy in Buildings; Estimates and Costing; Power Systems; Turbomachines and Advanced Fluid Dynamics; Advanced Power Electronics; SmartGrid.

**Admission Requirements:** Entry to the programme is open to individuals who have Second Class Honours in a Level 8 engineering degree in a related discipline from a recognised university or third level college.

**IELTS:** Minimum 6.5 overall score required with no section less than 5.5.

**Programme Webpage:** [shortened as] [www.bit.ly/1F1D62N](http://www.bit.ly/1F1D62N)

**Application:** Apply online at <https://nuigalway.elluciancrmrecruit.com/Apply>

**B7 MSc in Sustainable Energy Engineering\***

**WIT**

**Study Location:** Waterford Institute of Technology

**Programme Duration:** 1 year

**Programme Outline:** This programme will provide students with expertise in energy use, environmental performance and sustainability in the design and operation of buildings and their associated facilities and services systems. It will encourage the development of students' powers of analysis, synthesis and communication to develop a broader understanding of Low Energy Building Design and Management.

**Indicative Content:** Research Methodology; Personal Development & Effectiveness; Statistical Analysis for Engineers; Energy Modelling for nZEB Design; Mechanical Services Systems; Low Energy Building Systems design; Sustainability & the Environment; Energy Modelling for HVAC Systems & Controls; Energy Auditing; Building Performance & Analysis; Electrical Systems & Energy Monitoring; Electrical Generation Technology.

**Admission Requirements:** The normal minimum expected entry requirement for the MSc in Sustainable Energy Engineering will be a cognate accredited NFQ Level 8 Honours 2.2. Engineering or Science Degree.

**IELTS:** Minimum 6.5 overall score required with no section lower than 6.0.

**Programme Webpage:** [shortened as] <https://bit.ly/2Wx4lyT>

**Application:**

**PAC Code: WD554**

Apply online via The Postgraduate Applications Centre (PAC) – [www.pac.ie](http://www.pac.ie) – using the PAC application code shown above.

**B8 MSc in Water Resources Engineering\***

**NUIG**

**Study Location:** NUI Galway

**Programme Duration:** 1 year

**Programme Outline:** This programme will provide engineers with the technical competences to provide solutions to deliver safe/clean water. The programme will also give opportunities to students to study economics and the project management of large projects. Key components of this programme are a focus on understanding and using modern hydraulic modelling tools, and working in design groups.

**Indicative Content:** Core – Hydrology & Water Resources; Hydraulic Modelling; Design of Sustainable Environmental Systems; Hydropower; Water Quality Modelling; Water Resources in Developing Countries; Applied Field Hydrogeology; Advanced Fluid Mechanics; Numerical Analysis; Integration Design Project. Options – Computational Methods in Civil Engineering; Turbomachines & Advanced Fluid Dynamics; Environmental Economics; Engineering Finance Project Management; Applied Statistics for Engineers; Computational Fluid Dynamics; Environmental Impact Assessment; Global Climate Change; Introduction to Applied Field Hydrology.

**Admission Requirements:** Minimum entry requirement is a Second Class Honours Grade 1 in civil/environmental engineering or equivalent. Applications from candidates from cognate disciplines will be considered on a case-by-case basis.

**IELTS:** Minimum 6.5 overall score required with no section less than 5.5.

**Programme Webpage:** [shortened as] <https://bit.ly/3ew07xt>

**Application:** Apply online at <https://nuigalway.elluciancrmrecruit.com/Apply>

## **B9 MSc in Environmental Engineering**

**TCD**

**Study Location:** Trinity College Dublin

**Programme Duration:** 1 year

**Programme Outline:** The MSc in Environmental Engineering provides education and training to those eager to pursue a career in the protection of the Environment. It aims to develop students with a specialist understanding in the area of Environmental challenges facing the Environment today, and with specialist skills to address these. The programme explores the themes of water, air, noise and soil pollution and how we may develop solutions for these challenges to protect the environment and society. The programme also incorporates the grand challenges facing Environmental Engineers of this era including climate change, sustainability, and renewable energy.

**Indicative Content:** Civil Engineering Management; Research Methodology; Research Dissertation; Hydrological Processes and Hydrometry; Spatial Environmental Analysis and Impact Assessment; Air Pollution; Waste Management and Energy Recovery; Water Quality and Hydrological Modelling; Water Resource Planning and Climate Change; Sustainable Water Supply and Sanitation; Water Treatment Technologies; Introduction to Environmental Engineering.

**Admission Requirements:** An upper second honours degree (or equivalent) in a Civil Engineering or related degree. Relevant industrial experience may be taken into account in allocating places where the programme is oversubscribed.

**Programme Webpage:** [shortened as] <https://bit.ly/2voSJ3k>

**Application:** Apply online via programme webpage.

## **B10 ME in Sustainable Infrastructure\***

**TUD**

**Study Location:** Technological University Dublin (Bolton Street Campus)

**Programme Duration:** 1 year

**Programme Outline:** This programme is designed to provide Civil, Structural and Environmental Engineering graduates, and graduates from closely related disciplines, with specialised skills and knowledge in technical design for Sustainable Infrastructure. The programme consists of 12 taught modules and a Research Project module, and focuses, in particular, on sustainability, water engineering, numerical techniques, renewable and sustainable technologies and transport planning with options in advanced structural engineering.

**Indicative Content:** Core – Entrepreneurship for Engineers; Innovation and Knowledge Management; Research Methods; Statistical Analysis for Engineers; Introduction to Sustainable Infrastructure; Sustainable Infrastructure Research Project. Options – Finite Elements in Science and Engineering; Water Resources and Quality Management; Climate Resilient Infrastructure; Transport Planning & Simulation; Traffic Management & Road Safety; Energy Infrastructure; Waste and Environmental Management Systems; Structural Stability; Structural Analysis & Dynamics.

**Admission Requirements:** An honours bachelor degree, with a minimum attainment of second class honours grade 2, in Civil/Structural/Environmental Engineering or a closely-related discipline. The degree should be of four years duration and accredited by the relevant professional body.

**IELTS:** Minimum 6.5 overall score required with no section less than 6.0.

**Programme Webpage:** [shortened as] <https://bit.ly/2WpVG1c>

**Application:** Apply via programme webpage.

### **B11 MSc in Environmental Technology\***

**UCD**

**Study Location:** University College Dublin

**Programme Duration:** 1 year

**Programme Outline:** This programme will enable its students to acquire skills in the areas of environmental engineering, risk assessment, air pollution, waste management, life cycle assessment, buildings and environment, energy systems and sustainable environment. This Masters will provide graduates with the skills to develop technological solutions for air, water and soil protection and emerging sectors across industry (particularly agri-food and bioresources), consulting companies and regulatory authorities.

**Indicative Content:** Buildings and Environment; Quantitative Risk Assessment for Human and Animal Health; Environmental Engineering; Life Cycle Assessment; Advanced Air Pollution; Waste to Energy Processes & Technologies; LCA Applications; Research and Teaching Methods; Energy Systems and Sustainable Environment; Thesis.

**Admission Requirements:** Minimum of a 2nd Class honours degree in Science, Engineering, Agricultural Science, Environmental Science or related discipline.

**IELTS:** Minimum 6.5 overall score required with no section lower than 6.0.

**Programme Webpage:** [shortened as] [www.bit.ly/14UK6XV](http://www.bit.ly/14UK6XV)

**Application:** Apply online via programme webpage.

### **B12 MEngSc in Water, Waste and Environmental Engineering\***

**UCD**

**Study Location:** University College Dublin

**Programme Duration:** 1 year

**Programme Outline:** This programme prepares graduates to work in the broad field of environmental protection and management. Students in this programme will gain advanced theoretical and conceptual knowledge and

understanding in the area of environmental engineering on topics such as engineering hydrology, environmental modelling, water and wastewater treatment, solid waste management, and environmental data analysis, among others.

**Indicative Content:** Core - Introduction to Water Resources Engineering 1; Science and Technology for Sustainable Development; Water Waste and Environmental Modelling; Environmental Impact Assessment; Quantitative Methods for Engineers; Environmental Research Project. Options - Unit Treatment Process in Water Engineering; Hydraulic Engineering Design; Introduction to Water Resources Engineering 2; Integrated Municipal Solid Waste; Remote Sensing; Advanced Air Pollution; Civil Engineering Systems; Freshwater Resources Assessment; GIS and Data Analysis; GIS and Remote Sensing; Geographical Information Systems for Policy and Planning; Applied Statistical Modelling.

**Admission Requirements:** A recognised bachelor's degree (honours) in engineering (minimum 4-yr, 240 ECTS), preferably in civil engineering or environmental engineering, or equivalent.

**IELTS:** Minimum 6.5 overall score required with no section lower than 6.0.

**Programme Webpage:** [shortened as] [www.bit.ly/1607Ekt](http://www.bit.ly/1607Ekt)

**Application:** Apply online via programme webpage.

## **B13 MSc in Innovative Technology Engineering\***

**WIT**

**Study Location:** Waterford Institute of Technology

**Programme Duration:** 1 year

**Programme Outline:** The Masters in Innovative Technology Engineering degree aims to produce graduates with strong skills in critical thinking and with a creative attitude necessary to instigate future developments in the field of Engineering Technology. The student will attain an academic mastery in their specialisation field while developing a broad knowledge of other related fields and how these converge.

**Indicative Content:** Core – Strategic Technological Innovation; Nanotechnology; Biomedical Science; Green Technology and Alternative Energy Sources; Convergent Technologies for Biomedical and Electro-Mechanical Applications; Novel Materials: Their Properties and Exploitation; Industrial Research 2; Dissertation. Options – Quality Management & Regulatory Affairs; Mechanics of Materials; Control Engineering; Technology Management; New Product Development Strategy; Product Design & Development; Cognitive Technologies; Entrepreneurship.

**Admission Requirements:** The normal minimum expected entry requirement for the MSc in Innovative Technology Engineering will be a cognate accredited NFQ Level 8 Honours 2.2. Engineering or Science Degree.

**IELTS:** Minimum 6.5 overall score required with no section less than 6.0.

**Programme Webpage:** [shortened as] <https://bit.ly/3jmfF10>

**Application:**

Apply online via The Postgraduate Applications Centre (PAC) – [www.pac.ie](http://www.pac.ie) – using the PAC application code shown above.

**PAC Code: WD555**

**Study Location:** Cork Institute of Technology

**Programme Duration:** 1 year

**Programme Outline:** The Master of Engineering in Structural Engineering programme aims to develop advanced analytical, design and research skills in Structural Engineering. Graduates of this programme will be well equipped to meet the challenges of the modern Structural Engineering industry, providing and protecting the physical infrastructure that underpins society; in this context a broad range of infrastructure is addressed.

**Indicative Content:** Core – Sustainability in Engineering; Structural Engineering; Computational Solid Modelling; Engineering Research Skills; Adv. Geotechnical Engineering; Bridge Engineering; Infrastructure/Special Structure; Advanced Structural Design; Project Development; Research Project. Options – Infrastructure Asset Management; Engineering Project Management.

**Admission Requirements:** A minimum of a Second Class Honours Grade 2 in a professionally accredited Honours Degree Programme in Civil or Structural Engineering. Equivalent recognition may be given through the Recognition of Prior Learning (RPL) process on an individual case-by-case basis to candidates who have not achieved this academic standard but who can demonstrate significant relevant professional experience in the discipline of Structural Engineering.

**Programme Webpage:** <https://www.cit.ie/programme/CRCSTRU9>

**Application:** Apply online via the programme webpage.

**Study Location:** University College Dublin

**Programme Duration:** 1 year

**Programme Outline:** The programme includes specialist modules in structural dynamics, bridge engineering, structural design and professional engineering. You will also learn how to work in a multidisciplinary setting through combined modules with Architecture students. The programme provides advanced learning in the field of Structural Engineering and will provide you with an ability to identify, formulate, analyse and solve complex structural engineering problems.

**Indicative Content:** Core – Realising Built Projects; Advanced Structural Analysis & Design; Innovation Leadership; Structural Dynamics; Structural Research Project; Fibre Reinforced Composites; Quantitative Methods for Engineers. Options – Agency Design/Build; Structural Design (Building Construction); Bridge Engineering; Soil Mechanics and Geotechnical Engineering; Construction Management; Engineering Design Project; Energy Systems in Buildings; Professional Engineering (Management); Environmental Assessment and Management.

**Admission Requirements:** Honours Bachelor's Degree in Engineering or equivalent (with a minimum of 2:2 honours level, or equivalent) and the appropriate prior learning.

**IELTS:** Minimum 6.5 overall score required with no section lower than 6.0.

**Programme Webpage:** [shortened as] <http://bit.ly/2ctjjzc>

**Application:** Apply online via programme webpage.



**Study Location:** Trinity College Dublin

**Programme Duration:** 1 year

**Programme Outline:** The MSc in Mechanical Engineering is designed to provide a flexible route to a Masters qualification for students who have completed a Bachelor's degree. It addresses advanced topics over a wide range of Mechanical and Manufacturing Engineering subjects. Within the MSc, there is a wide range of module options and an excellent opportunity to engage in topical research with leading research groups within the School of Engineering, as an important part of this programme is a research dissertation, which directly builds on some of the content of the modules.

**Indicative Content:** Core – Research Methods; Research Project. Sample Options – Advanced Materials; Advanced Thermal Fluid Sciences; Micro and Precision Manufacturing; Supply Chain Management; Wind Energy; Energy Policy and Demand; Advanced Spatial Analysis Using GIS; Medical Device Design; Tissue Engineering; Biomechanics; Biomaterials.

**Admission Requirements:** Candidates for this programme must normally hold a first or second class, first division honours Bachelor degree in engineering or a cognate discipline.

**Programme Webpage:** [shortened as] <https://bit.ly/2vqU61p>

**Application:** Apply online via programme webpage.

**Study Location:** Trinity College Dublin

**Programme Duration:** 1 year

**Programme Outline:** The MSc in Transport Engineering, Policy and Planning provides education and training to the next generation of Transport Professionals. The programme aims to equip students with the skills to address the numerous challenges in the transportation field. The programme examines areas of transport policy, planning, design, modelling and analysis. The programme also incorporates modules addressing issues such as climate change, sustainability, and renewable energy.

**Indicative Content:** Civil Engineering Management; Research Methodology; Research Dissertation; Transport Engineering; Transport Modelling; Highway Engineering; Applied Transportation Analysis.

**Admission Requirements:** An upper second honours degree (or equivalent) in a Civil Engineering or related degree. Relevant industrial experience may be taken into account in allocating places where the programme is oversubscribed.

**Programme Webpage:** <https://www.tcd.ie/civileng/msc-in-transport-engineering-policy-and-planning/>

**Application:** Apply online via programme webpage.