



# Irish Aid

Rialtas na hÉireann

Government of Ireland

## Irish Aid IDEAS Programme

**Directory of Postgraduate Courses eligible for  
Fellowship Awards 2019  
(for 2019-2020 Entry)**

**VIETNAM**

Compiled by:



41 Morehampton Road, Dublin 4, Ireland

Tel: +353 - 1 - 660 5233

Fax: +353 - 1 - 668 2320

Email: [office@icosirl.ie](mailto:office@icosirl.ie)

Web: [www.icosirl.ie](http://www.icosirl.ie)

## UNIVERSITIES, INSTITUTES OF TECHNOLOGY AND COLLEGES WITH LISTED COURSES

### IRELAND

AIT	Athlone Institute of Technology	Athlone	<a href="http://www.ait.ie">www.ait.ie</a>
CIT	Cork Institute of Technology	Cork	<a href="http://www.cit.ie">www.cit.ie</a>
DCU	Dublin City University	Dublin	<a href="http://www.dcu.ie">www.dcu.ie</a>
DIT	Dublin Institute of Technology	Dublin	<a href="http://www.dit.ie">www.dit.ie</a>
ITC	Institute of Technology, Carlow	Carlow	<a href="http://www.itcarlow.ie">www.itcarlow.ie</a>
ITS	Institute of Technology, Sligo	Sligo	<a href="http://www.itsligo.ie">www.itsligo.ie</a>
GCD	Griffith College Dublin	Dublin	<a href="http://www.gcd.ie">www.gcd.ie</a>
GMIT	Galway-Mayo Institute of Technology	Galway	<a href="http://www.gmit.ie">www.gmit.ie</a>
LIT	Limerick Institute of Technology	Limerick	<a href="http://www.lit.ie">www.lit.ie</a>
MU	Maynooth University	Near Dublin	<a href="http://maynoothuniversity.ie">maynoothuniversity.ie</a>
NCI	National College of Ireland	Dublin	<a href="http://www.ncirl.ie">www.ncirl.ie</a>
NUIG	National University of Ireland, Galway	Galway	<a href="http://www.nuigalway.ie">www.nuigalway.ie</a>
TCD	Trinity College Dublin	Dublin	<a href="http://www.tcd.ie">www.tcd.ie</a>
UCC	University College Cork	Cork	<a href="http://www.ucc.ie">www.ucc.ie</a>
UCD	University College Dublin	Dublin	<a href="http://www.ucd.ie">www.ucd.ie</a>
UCDMS	UCD Michael Smurfit Business School	Dublin	<a href="http://smurfitschool.ie">smurfitschool.ie</a>
UL	University of Limerick	Limerick	<a href="http://www.ul.ie">www.ul.ie</a>

### NOTES ON COURSE LISTINGS

The courses included here have been identified as appropriate for applicants to the Irish Aid IDEAS Programme. Every care has been taken in compiling the listing. However, certain information for 2019-2020 was not fully available at the time of publication. In addition, some course information, web addresses and contacts will inevitably change during each academic year. **Before preparing or submitting an application, you are advised to check the latest details provided online by the relevant institution and you should not rely solely on the information in this document.**

### ABBREVIATED WEB ADDRESSES

Many long course web addresses have been shortened, e.g. [www.bit.ly/qEdRCn](http://www.bit.ly/qEdRCn), for ease of transcription, if required. Any capitalisation should be noted accurately as these addresses are case-sensitive.

### Irish Council for International Students (ICOS)

The Irish Council for International Students (ICOS), based in Dublin, is an independent non-profit network of educational institutions, NGOs and individuals interested in international education and working with government and other agencies to promote good policies and best practice in relation to the recruitment, access and support of international students in Irish education. ICOS manages administrative aspects of the IDEAS Scholarship Programme on behalf of Irish Aid.

# 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 pi)



## Table of Contents

Courses marked with an asterisk (\*) are courses which are known by Irish Aid to 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. Please check the course webpage for more information. IELTS requirements for other courses may also change after the publication of this directory, so please check the course webpage or contact the college directly to confirm the IELTS requirements for any course(s) you are considering.

Underlined courses are those which Irish Aid knows from experience are highly competitive and/or only accept very high-achieving applicants.

### **A Agriculture, Environmental Science, Conservation, Rural Development and related**

A1	MSc in Applied Marine Conservation	GMIT
A2	MSc in Conservation Behaviour	GMIT
A3	MSc in Geocomputation	MU
A4	MSc in Geographical Information Systems and Remote Sensing	MU
A5	MSc in Climate Change	MU
A6	<u>MSc in Climate Change, Agriculture and Food Security*</u>	NUIG
A7	MSc in Environmental Leadership*	NUIG
A8	MSc in Environmental Science	TCD
A9	MSc in Biodiversity and Conservation	TCD
A10	MSc in Applied Coastal and Marine Management*	UCC
A11	MSc in Food Security Policy and Management*	UCC
A12	MSc in Co-operatives, Agri-Food and Sustainable Development*	UCC
A13	MSc in Food Security Policy and Management*	UCC
A14	MSc (Agr) in Sustainable Agriculture and Rural Development*	UCD
A15	MSc (Agr) in Environmental Resource Management*	UCD
A16	MSc in Environmental Science*	UCD
A17	MSc in World Heritage Management and Conservation*	UCD
A18	MSc in Sustainable Energy and Green Technologies*	UCD
A19	MSc in Applied Geospatial Analysis*	UCD
A20	MSc in Urban Environment*	UCD

### **B Food Science, Food Engineering and related**

B1	MSc in Food Science*	UCC
B2	MSc in Food Microbiology*	UCC

#### See also:

A12	MSc in Co-operatives, Agri-Food and Sustainable Development*	UCC
F28	MSc in Food Business Strategy*	UCDMS

### **C Pharmacy and Biotechnology**

C1	MSc in Biopharmaceutical Technology	AIT
C2	MSc in Bioprocess Engineering*	DCU
C3	MSc in Pharmaceutical Quality Assurance and Biotechnology	DIT
C4	MSc in Pharmaceutical Regulatory Affairs	ITC

C5	MSc in Bioprocessing Science	ITS
C6	MSc in Biomedical Science*	NUIG
C7	MSc in Biomedical Engineering*	NUIG
C8	MSc in Biotechnology*	NUIG
C9	MSc in Neuropharmacology*	NUIG
C10	MSc in Pharmaceutical Sciences	TCD
C11	MSc in Immunology	TCD
C12	MSc in Bioengineering – General Stream	TCD
C13	MSc in Bioengineering – Tissue Engineering Stream	TCD
C14	MSc in Bioengineering – Medical Device Specialisation Stream	TCD
C15	MSc in Chemistry – Analysis of Pharmaceutical Compounds*	UCC
C16	MSc in Biotechnology*	UCC

## **D Engineering, Hydrology, Sustainable Technology**

D1	MEng in Civil Engineering (Environment and Energy)	CIT
D2	MEng in Mechanical and Manufacturing Engineering*	DCU
D3	MSc in Energy Management*	DIT
D4	ME in Sustainable Infrastructure	DIT
D5	ME in Sustainable Electrical Energy Systems	DIT
D6	ME in Mechanical Engineering	DIT
D7	MSc in Electronic and Communications Engineering	DIT
D8	MSc in Quantity Surveying	LIT
D9	Master of Civil Engineering*	NUIG
D10	ME in Energy Systems Engineering*	NUIG
D11	MSc in Water Resources Engineering*	NUIG
D12	MSc in Energy Science	TCD
D13	MSc in Mechanical Engineering	TCD
D14	MSc in Environmental Engineering	TCD
D15	MSc in Structural and Geotechnical Engineering	TCD
D16	MSc in Sustainable Energy	TCD
D17	MSc in Transport Engineering, Policy & Planning	TCD
D18	MEngSc in Sustainable Energy*	UCC
D19	MEngSc in Electrical & Electronic Engineering*	UCC
D20	MEngSc Structural Engineering*	UCD
D21	MSc in Environmental Technology*	UCD
D22	MEngSc in Water Waste and Environmental Engineering*	UCD
D23	MSc in Sustainable Resource Management: Policy and Practice*	UL/NUIG
D24	MSc in Sustainable Energy Engineering	WIT

### **See also:**

C2	MSc in Bioprocess Engineering*	DCU
C7	MSc in Biomedical Engineering*	NUIG
C12	MSc in Bioengineering – General Stream	TCD
C13	MSc in Bioengineering – Tissue Engineering Stream	TCD
G31	MSc in Electronic Information Engineering	TCD

**E Economics, Finance and Accounting**

E1	MBS in International Accounting	DIT
E2	MSc in Accounting and Finance Management	GCD
E3	MSc in Economics and Financial Risk Analysis*	MU
E4	MSc in Economics*	TCD
E5	MSc in Finance*	TCD
E6	MSc in Financial (Banking and Risk Management)*	UCC
E7	MSc in Business Economics*	UCC
E8	MSc in Applied Economics*	UCD
E9	MSc in Aviation Finance*	UCDMS
E10	<u>MSc in Finance*</u>	UCDMS
E12	<u>MSc in Quantitative Finance*</u>	UCDMS
E12	<u>Master of Accounting*</u>	UCDMS
E14	MSc in Renewable Energy & Environmental Finance*	UCDMS

**F Management and Business**

F1	Master of Business	AIT
F2	MA in Human Resource Management	CIT
F3	MSc in International Business	CIT
F4	MA in Global Business Practice	CIT
F5	MSc in Human Resource Management*	DCU
F6	MSc in Management (Business)*	DCU
F7	MSc in Strategic Management	DIT
F8	MSc in Supply Chain Management	DIT
F9	MSc in Digital Marketing	ITC
F10	MSc in Supply Chain Management	ITC
F11	MSc in Information Technology Management	ITC
F12	Master of Business	ITC
F13	MSc in Business Management*	MU
F14	MSc in Strategy and Innovation*	MU
F15	MA in Human Resource Management	NCI
F16	MSc in Management	NCI
F17	MSc in International Business	NCI
F18	MSc in Human Resource Management*	NUIG
F19	MSc in Business Analytics*	NUIG
F20	MSc in Management*	TCD
F21	MSc in International Management*	TCD
F22	MSc in Human Resource Management*	TCD
F23	MSc in Business Information and Analytics Systems*	UCC
F24	MSc in Human Resource Management*	UCDMS
F25	MSc in Digital Innovation*	UCDMS
F26	MSc in Digital Marketing*	UCDMS
F27	MSc in Business Analytics*	UCDMS
F28	MSc in Food Business Strategy*	UCDMS
F29	MSc in Management*	UCDMS
F30	MSc in International Business*	UCDMS
F31	<u>MSc in Project Management*</u>	UCDMS
F32	MSc in Supply Chain Management*	UCDMS
F33	<u>MSc in Project Management*</u>	UL
F34	MA in Business Management*	UL

F35	Masters in Business Studies (MBS) – Human Resource Management*	WIT
F36	Masters in Business Studies (MBS) – Management*	WIT

**See also:**

A12	MSc in Co-operatives, Agri-Food and Sustainable Development*	UCC
E2	MSc in Accounting and Finance Management	GCD
E7	MSc in Business Economics*	UCC
G22	MSc in IT-Enabled Innovation*	MU
G32	MSc in Information Systems for Business Performance*	UCC

## **G Information Systems and Communications Technology**

G1	MSc in Data Analytics	AIT
G2	MSc in Software Engineering	AIT
G3	MSc in Information Security	CIT
G4	MSc in Artificial Intelligence	CIT
G5	MSc in Data Science and Analytics	CIT
G6	MSc in Computing (Data Analytics)	DCU
G7	MSc in Computing (Cloud Computing)	DCU
G8	MSc in Computing (Software Engineering)	DCU
G9	MSc in Computing (Security and Forensic Computing)	DCU
G10	MEng in Electronic and Computer Engineering (General Award)*	DCU
G11	MEng in Electronic and Computer Engineering (Nanotechnology)*	DCU
G12	MEng in Electronic and Computer Engineering (Advanced Data Networks)*	DCU
G13	MEng in Electronic and Computer Engineering (Internet of Things)*	DCU
G14	MEng in Electronic and Computer Engineering (Processing & Analysis)*	DCU
G15	MSc in Computing (Data Analytics)*	DIT
G16	MSc in Computing (Advanced Software Development)*	DIT
G17	MSc in Computing	GCD
G18	MSc in Applied Digital Media	GCD
G19	MSc in Big Data Management and Analytics	GCD
G20	MSc in Network and Information Security	GCD
G21	MSc in Data Science	ITC
G22	MSc in IT-Enabled Innovation*	MU
G23	MSc in Computer Science (Software Engineering)	MU
G24	MSc in Cyber Security	NCI
G25	MSc in Cloud Computing	NCI
G26	MSc in Data Analytics	NCI
G27	MSc in Information Systems Management*	NUIG
G28	MSc in Computer Science (Future Networked Systems)	TCD
G29	MSc in Computer Science (Intelligent Systems)	TCD
G30	MSc in Computer Science (Augmented and Virtual Reality)	TCD
G31	MSc in Electronic Information Engineering	TCD
G32	MSc in Information Systems for Business Performance*	UCC
G33	MSc in Computer Science (Interactive Media)*	UCC
G34	MSc in Data Science and Analytics*	UCC
G35	MSc in Computing Science*	UCC

**See also:**

D7	MSc in Electronic and Communications Engineering	DIT
----	--	-----

D19	MEngSc in Electrical & Electronic Engineering*	UCC
F25	MSc in Digital Innovation*	UCDMS
F26	MSc in Digital Marketing*	UCDMS
H6	MSc in Interactive Digital Media	TCD

## **H Other Courses**

H1	MA in Public Relations and New Media	CIT
H2	MA in Journalism and Digital Content Creation	CIT
H3	MSc in Tourism Management	DIT
H4	MSc in Hospitality Management	DIT
H5	MA in Creative Practice	GMIT
H6	MSc in Interactive Digital Media	TCD
H7	MSc in Digital Humanities and Culture	TCD
H8	MA/MSc in Interactive Media*	UL
H9	MA in International Tourism*	UL

**A**

**Agriculture,  
Environmental Science,  
Conservation,  
Rural Development  
and related studies**

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

**Course Duration:** 1 year

**Course Outline:** This one year MSc degree focuses on core and specialist competences in key themes of fisheries, marine conservation; sustainability and ecosystem based management.

**Indicative Content:** Core – 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. Options – Seabird and Marine Mammal Population Assessment techniques; Acoustic Monitoring as a Marine Conservation Tool; Stakeholder engagement; 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.

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

**Application:** Contact [international@gmit.ie](mailto:international@gmit.ie) for an application form.

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

**Course Duration:** 1 year

**Course 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. This course includes a residential field course on an island off the west coast of Ireland, where the behaviour of a number of species will be studied in a natural setting.

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

**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.

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

**Application:** Contact [international@gmit.ie](mailto:international@gmit.ie) for an application form.

**Study Location:** Maynooth University

**Course Duration:** 1 year

**Course Outline:** 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 Practice; 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.

**Course 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.

**Study Location:** Maynooth University

**Course Duration:** 1 year

**Course 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.

**Course 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.

**A5 MSc in Climate Change****MU****Study Location:** Maynooth University**Course Duration:** 1 year

**Course 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.

**Course Webpage:** [shortened as] <https://bit.ly/2ljULdE>

**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.

**A6 MSc in Climate Change, Agriculture and Food Security\*****NUIG****Study Location:** NUI Galway**Course Duration:** 1 year

**Course 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.

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

**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: GYS00**

**A7 MSc in Environmental Leadership\***

**NUIG**

**Study Location:** NUI Galway

**Course Duration:** 1 year

**Course 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.

**Course Webpage:** [shortened as] <http://bit.ly/2w8g8rr>

**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: GYS33**

**A8 MSc in Environmental Science**

**TCD**

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** The overall aim of the course is to promote students' understanding of environmental science, and their capability to apply that knowledge to current environmental issues. Students should develop the necessary intellectual skills and the practical expertise to enable them to design and execute high quality independent research and become skilled environmental communicators.

**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.

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

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

<b>A9</b>	<b>MSc in Biodiversity and Conservation</b>	<b>TCD</b>
-----------	---	------------

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** This course will provide in-depth training and experience for those looking to further their career in various aspects of biodiversity and its conservation. The course will be taught through a variety of methods: lectures, practicals, field-based learning, guided reading and discussion groups and web-based methods. Students will undertake individual research projects, both desk-based studies and experimental projects. A highlight of the course will be the residential spring field course based in South Africa, focusing on practical aspects of biodiversity conservation.

**Indicative Content:** Introduction to Biodiversity; Introduction to Conservation Biology; Practical Environmental Assessment; Human Interactions With Biodiversity; Impacts of Environmental Change on Biodiversity; Data Handling and Analysis; Taxonomy systematics and ID Skills; Practical Conservation Skills; Overseas Field Course; Individual Desk Study; Project Planning; Individual Research Project.

**Admission Requirements:** Applicants should hold at least an upper second class honours, or equivalent qualification, in a science subject that included significant components of botany, zoology or a relevant life science. Non-EU applicants will be required to hold an equivalent qualification. Candidates with relevant experience as professional practitioners in biodiversity management or policy may be accepted with lower qualifications.

**Course Webpage:** <http://naturalscience.tcd.ie/postgraduate/msc-biodiversity/>

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

<b>A10</b>	<b>MSc in Applied Coastal and Marine Management*</b>	<b>UCC</b>
------------	--	------------

**Study Location:** University College Cork

**Course Duration:** 1 year

**Course 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.

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

**Application:**

**PAC Code: CKE39**

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

**A11 MSc in Food Security Policy and Management\***

**UCC**

**Study Location:** University College Cork

**Course Duration:** 1 year

**Course Outline:** The MSc in Food Security Policy and Management is focused on the design and implementation of food security policies and programmes. It aims to equip students – recent graduates, as well as early- and mid-career development professionals – with skills, knowledge and competencies that can be applied particularly in the areas of project and programme management, multi-sectoral policy development and implementation, and impact assessment of programmes aimed at improving food security and dietary quality.

**Indicative Content:** This is a new course for 2019 entry and an indicative list of modules is not yet available. However, the skills and competencies that will be developed and enhanced are in the areas of socio-economic and policy analysis applied to food security and nutrition; design, implementation and assessment of multi-sectoral nutrition-sensitive projects and programmes (including in humanitarian contexts); design and conduct of socio-economic, gender-disaggregated research; application of digital data gathering techniques and information systems to address food security and nutrition/health-related problems.

**Admission Requirements:** At least a Second Class Honours Grade 2 in a 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.

**Course Webpage:** not yet available

**Application:**

Apply online via The Postgraduate Applications Centre (PAC) – [www.pac.ie](http://www.pac.ie).

**A12 MSc in Co-operatives, Agri-Food and Sustainable Development\*****UCC**

**Study Location:** University College Cork

**Course Duration:** 1 year

**Course Outline:** This is a unique course, 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.

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

**Application:**

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 course webpage.*

**PAC Code: CKL03****A13 MSc in Food Security Policy and Management\*****UCC**

**Study Location:** University College Cork

**Course Duration:** 1 year

**Course Outline:** This Masters programme is a direct response to the growing global focus on the interconnected issues of food insecurity, malnutrition and dietary quality. The programme is designed to address the increased demand for appropriate skills to address global food security and nutrition challenges in an evolving environment. The programme aims to equip students with skills, knowledge and competencies that can be applied particularly in the areas of project and programme management, multi-sectoral policy development and implementation, and impact assessment of programmes aimed at improving food security and dietary quality.

**Admission Requirements:** Candidates must hold the equivalent of a 2.2 or above 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 5.5.

**Course Webpage:** Not available at the time of publication.

**Application:** Apply online via The Postgraduate Applications Centre (PAC) – [www.pac.ie](http://www.pac.ie). Course code for application not available at the time of publication.

**A14 MSc (Agr) in Sustainable Agriculture and Rural Development\* UCD**

**Study Location:** University College Dublin

**Course Duration:** 1 year

**Course Outline:** This course 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.

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

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

**A15 MSc (Agr) in Environmental Resource Management\* UCD**

**Study Location:** University College Dublin

**Course Duration:** 1 year

**Course 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.

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

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

## **A16 MSc in Environmental Science\***

**UCD**

**Study Location:** University College Dublin

**Course Duration:** 1 year

**Course 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.

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

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

## **A17 MSc in World Heritage Management and Conservation\***

**UCD**

**Study Location:** University College Dublin

**Course Duration:** 16 months

**Course 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.

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

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

<b>A18</b>	<b>MSc in Sustainable Energy and Green Technologies*</b>	<b>UCD</b>
------------	--	------------

**Study Location:** University College Dublin

**Course Duration:** 1 year

**Course Outline:** This course focuses on 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:** Entrepreneurship & Plant Biotechnology; The Bioeconomy; Life Cycle Assessment; Thesis; Advanced Air Pollution; Waste to Energy Processes & Technologies; Energy Systems Integration; LCA Applications; Research and Teaching Methods; Energy Systems & Sustainable Environments.

**Admission Requirements:** A good honours degree (2.2 or higher) in engineering, physical science or environmental related degree. Other disciplines may be considered if they include strong mathematical, technological, and analytical skills.

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

**Course Webpage:** [shortened as] <https://bit.ly/2ffOs7n>

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

<b>A19</b>	<b>MSc in Applied Geospatial Analysis*</b>	<b>UCD</b>
------------	--	------------

**Study Location:** University College Dublin

**Course Duration:** 1 year

**Course Outline:** 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.

**Indicative Content:** Core – Dissertation; Applied GIS; Research Design; Advanced GIS; Remote Sensing. Options – Introduction to GIS and Spatial Methods in Archaeology; Advanced GIS in Archaeology and Heritage; Critical Geopolitics of Europe; International Economic Crisis; Geo-spatial Technologies; Urban Rivers; Reimagining Dublin: An Interdisciplinary Exploration in Urban Regeneration; Geographies of the Global South; Latin America: Social Movements and Postcolonial Approaches; Practical Environmental Assessment; Population Geography; Social Simulation: Methods and Models; Quantitative Data Analytics & Applications.

**Admission Requirements:** This programme is intended for applicants with an honours bachelor's degree or international equivalent in any discipline including geography, political science, history, anthropology, economics and sociology, or professionals working in related fields. An upper second class honours (2.1) is required. Applicants with a 2.2 may be considered after interview in exceptional circumstances.

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

**Course Webpage:** [shortened as] <https://bit.ly/2DcWLSN>

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

<b>A20 MSc in Urban Environment*</b>	<b>UCD</b>
--------------------------------------	------------

**Study Location:** University College Dublin

**Course Duration:** 1 year

**Course Outline:** This MSc looks at urban environments holistically by integrating the perspectives of human and physical geography to explore urban environments. Exploration is complemented by developing fieldwork and geospatial skills. The key objective of the course is to address the challenge of achieving global sustainability by making resource efficient, smart and liveable cities.

**Indicative Content:** Environmental Risk and Behaviour; Dissertation; Geo-spatial Technologies; Urban Rivers; Reimagining Dublin: An Interdisciplinary Exploration in Urban Regeneration; Applied GIS; Research Design; International Urban Field Studies; Governing Nature.

**Admission Requirements:** This programme is intended for applicants with an honours bachelor's degree or international equivalent in any discipline including geography, political science, history, anthropology, economics and sociology, or professionals working in related fields. An upper second class honours (2.1) is required. Applicants with a 2.2 may be considered after interview in exceptional circumstances.

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

**Course Webpage:** [shortened as] <https://bit.ly/2DcWLSN>

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

# **B**

**Food Science,  
Food Engineering,  
Bioresource Technology,  
and related studies**

**Study Location:** University College Cork

**Course Duration:** 1 year

**Course Outline:** This course offers advanced modules in established and emerging areas of Food Science plus modules in research methods. Novel methods of teaching with emphases on project work and innovative forms of learning are used.

**Indicative Content:** Core - Scientific Training for Enhanced Postgraduate Studies; Library Project in Food Science; Dissertation in Food Science. Options – Food Business: Markets and Policy; Material Science for Food Systems; Advanced Topics in Dairy Biochemistry; Advances in the Science of Muscle Foods; Advances in Food Formulation: Science and Technology; Novel Processing Technologies and Ingredients; Cheese and Fermented Dairy Products; Meat Science and Technology; Hygienic Production of Food; Human Nutrition and Health; Sensory Analysis in Nutrition Research; Chemistry of Food Proteins; Macromolecules and Rheology; Advanced Analytical Methods; Cereals and Related Beverages; Food Product Development and Innovation; Microbial Food Safety.

**Admission Requirements:** Candidates must be holders of an honours BSc degree, or equivalent qualification, in a discipline with a significant element of laboratory science, with a minimum of Second Class Honours Grade 1 or equivalent.

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

**Course Webpage:** <https://www.ucc.ie/en/ckr22/>

**Application:**

**PAC Code: CKR22**

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 course webpage.*

**Study Location:** University College Cork

**Course Duration:** 1 year

**Course Outline:** This course covers the breadth of classical and modern food microbiology, including food safety and spoilage; food fermentation; food biotechnology; hygienic production of food; the impact of diet on health; the molecular mechanisms of infectious microbes and the role of the gut microbiota in human health. The aim of this course is to educate you to an MSc level in food microbiology, emphasising areas in which UCC engages actively in research, e.g. food biotechnology, food fermentations, food safety, food for health.

**Indicative Content:** Core: Scientific Training for Enhanced Postgraduate Studies; Biotechniques; Library Project in Food Microbiology; Research Dissertation. Options: Food Fermentation and Mycology; Microbial Food Safety; Food Biotechnology; Hygienic production of Food; Functional Foods for Health; Food Markets and Policy

**Admission Requirements:** Candidates must be holders of an honours BSc degree, or equivalent qualification, in a discipline with a significant element of laboratory science, with a minimum of second class honours Grade 2 or equivalent.

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

**Course Webpage:** <https://www.ucc.ie/en/ckr19/>

**Application:**

**PAC Code: CKR19**

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 course webpage.*

**C**

**Pharmacy and  
Biotechnology**

**Study Location:** Athlone Institute of Technology

**Course Duration:** 1 year

**Course Outline:** The programme was conceived in response to significant job opportunities within Ireland's large and expanding biopharmaceutical sector. In addition to lectures and laboratory sessions at AIT, and site visits to local biopharmaceutical plants, students on the MSc will receive practical training at the National Institute for Bioprocessing Research & Training (NIBRT) in Dublin.

**Admission Requirements:** A first or a second class honours grade or an international equivalent in a Biology or Chemistry-related primary degree (for example Biotechnology, Toxicology, Biochemistry, Microbiology, Pharmaceutical Science, Genetics, Neuroscience, Pharmacology, Physiology, Medicinal Chemistry or an equivalent qualification). Graduates who hold equivalent qualifications in related science and technology disciplines or who have relevant industrial experience will be considered for places on a case-by-case basis.

**IELTS:** Minimum 6.5 overall score required with no band below 5.5.

**Course Webpage:** [shortened as] <https://bit.ly/2N8patw>

**Application:** Application forms can be downloaded at: [www.ait.ie/international/non-eustudents](http://www.ait.ie/international/non-eustudents)  
For enquiries, contact Mary Simpson, AIT International Office - [international@ait.ie](mailto:international@ait.ie) or +353 90 642 4562.

**Study Location:** Dublin City University

**Course Duration:** 1 year

**Course Outline:** This programme is an interactive and dynamic programme that will develop your knowledge and appreciation of the conceptual and factual bases for bioprocess design and operation. It also develops your understanding of bioprocessing, particularly the structures, roles and experimental methods associated with biopharmaceuticals, their analysis, production methods and technology for monitoring and control of bioprocesses.

**Indicative Content:** Fundamentals of Bioreaction Engineering; Bioseparations; Recombinant DNA Technology; Bioprocessing Laboratory; Introduction to Bioprocess Engineering; Bioprocess Scale Up & Technology Transfer; Animal Cell Culture Technology; Biopharmaceutical Industry Regulation & Management; Bioreactor Design, Modelling & Monitoring; Regulatory Affairs Sc. for Biotech Products; Formulation & Delivery of Biopharmaceuticals; Biopharmaceutical Facility Design & Operation; Bioprocess Engineering Design Project.

**Admission Requirements:** An honours degree (minimum second class honours grade 2) in Science or Engineering

**IELTS:** Minimum 6.5 overall score required with no band below 6.0.

**Course Webpage:** [shortened as] <https://bit.ly/2nLrYC7>

**Application:**

**PAC Code: DC735**

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

**Study Location:** Dublin Institute of Technology

**Course Duration:** Must be completed within 16 months

**Course Outline:** This programme is offered on a one year full—time basis followed by a 6 months industry based dissertation. It is designed to provide a bridge for graduates with a degree in science or related disciplines to the specific requirements of the pharmaceutical sector. The programme offers a broad based curriculum covering aspects of quality assurance, auditing, manufacturing and pharmaceutical science and biotechnology.

**Indicative Content:** Q.A., Auditing and Inspection; GMP and Validation; Biotechnology; Pharmaceutical Technology and Research Methods; Pharmaceutical Facilities and Utilities; Pharmaceutical Manufacturing and Management; Pharmaceutical Analysis & Method Validation; Medicinal Chemistry and Process Design & Development for API Production; Process Analytical Technology & Quality by Design; Biopharmaceutical Analysis; Validation of Aseptic Pharmaceuticals; Pharmaceutical Microbiology and Aseptic Manufacture; Pharmacology and Toxicology; Quality Risk Management; Process Validation for Biopharmaceuticals; Dissertation.

**Admission Requirements:** Honours bachelor degree in science or related discipline at 2.2 grade or higher or equivalent qualification.

**Course Webpage:** [shortened as] <http://bit.ly/2vRCooC>

**Application:** Apply via the 'Non-EU Sept Intake' button on the course webpage.

**Study Location:** Institute of Technology, Carlow

**Course Duration:** 1 year

**Course Outline:** This Masters programme presents the regulatory affairs role and specifically targets the pharmaceutical regulatory industry. It also provides a detailed insight into EU legislation and regulation as well as an overview of US regulation. The programme enables existing regulatory affairs personnel in the pharmaceutical regulatory industry to understand all current diagnostic and medical device regulations and develop the necessary skills to work successfully in the dynamic world of regulatory affairs.

**Indicative Content:** Life-cycle Management, Vigilance, Surveillance and Risk management; Pharmaceutical Technology Regulatory Affairs; Non-Clinical and Clinical Evaluation of Pharmaceutical Technologies; Principles of Discovery of medicines and Development Planning; Research methods and Technical Report Writing; Special Populations and Biologicals and Advanced Therapies; Dissertation.

**Admission Requirements:** An undergraduate degree with a minimum 2:2 or equivalent in science, engineering, quality, pharmaceutical or regulatory affairs or cognate areas.

**Course Webpage:** [shortened as] <https://bit.ly/2vNVHP2>

**Application:** Apply directly to the International Office by emailing [noneuapply@itcarlow.ie](mailto:noneuapply@itcarlow.ie) with an *IT Carlow Non-EU Application Form*, which is available for download at <https://bit.ly/2vSovWB>.

**Study Location:** Institute of Technology, Sligo

**Course Duration:** 1 year

**Course Outline:** This programme will equip participants with the appropriate skill range and skill selectivity in applied methods used in Bioprocessing and more broadly the Biotechnology Industry. The programme aims to produce graduates with the essential breadth and kind of knowledge, skills set and competences, required to function in the Biopharmaceutical and Biotechnology Industries.

**Indicative Content:** Bioprocessing Manufacturing Theory; Legislation and Regulatory Affairs for Biopharmaceuticals; Biocontamination Monitoring and Control; Bioanalytical Techniques; Research Methods Biopharma; Bioprocessing Manufacturing Laboratories; Formulation and Delivery of Biopharmaceuticals; Lean Six Sigma and Operations Management; Bioanalytics Practical Module; Bioprocess Validation; Dissertation.

**Admission Requirements:** The programme is open to students who have obtained an honour's degree (Level 8) or equivalent in an appropriate discipline (i.e. Engineering or Life Sciences).

**Course Webpages:** [shortened as] <https://bit.ly/2u4lfG9>

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

**Study Location:** Maynooth University

**Course Duration:** 1 year

**Course Outline:** This programme represents an innovative development in higher degree options in the biological sciences. It is targeted at biological and health science graduates who are interested in the major challenges in health and development today and who wish to broaden their understanding of immunology, its importance in global health and the factors that impact on immunological intervention strategies in health and disease. An important component of the course covers emerging and re-emerging diseases including diseases of poverty.

**Indicative Content:** Core – Fundamental Immunology; Advanced Immunology; Geography of Health & Health Care; Epidemiology & The Modelling of Human Disease; Bioethics; Biopharmaceuticals & Clinical Trial; Clinical Immunology; Introduction to Bioinformatics; Vaccines & Adjuvants; Research Project; Seminars in Advanced Immunology and Global Health. Options – Tumour Biology; Human Nutrition and Metabolic Disease; Clinical Proteomics: Discovery, Validation and Medical Utility.

**Admission Requirements:** An honours primary degree (grade 2.2 or above) in the biological or health related sciences. Candidates with other qualifications and suitable employment experience will be considered.

**Course Webpage:** [shortened as] <https://bit.ly/2PvrQ65>

**Application:**

**PAC Code: MHD50**

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

**Course Duration:** 1 year

**Course Outline:** This MSc programme aims to provide students with the underpinning knowledge and practical skills to pursue a successful career in biomedical science. The course is designed for those who wish to follow careers as Biomedical Scientists in research, the Health Service or in the wider context of biomedical science (including Medical Technologies, Bio-pharmaceutical and other Healthcare industries). A major objective of the course is to introduce students to an interdisciplinary approach to Biomedical Science, which utilises technologies and skills from a wide spectrum of scientific, engineering and clinical disciplines.

**Indicative Content:** Core – Research & Minor Thesis; Tissue Engineering; Materials, Science & Biomaterials; Applied Biomedical Sciences; Introduction to Business; Literature Analysis and Presentation Skills in Biomedical Research; Regulatory Compliance in Healthcare Manufacturing; Molecular Medicine. Options – Scientific Writing; Human Body Structure; Protein Technology; Human Body Function; Fundamental Concepts in Pharmacology; Cell & Molecular Biology: Advanced Technologies; Radiation and Medical Physics; Advanced Tissue Engineering; Introduction to Bioinformatics; Advanced Industrial Processes.

**Admission Requirements:** Graduates who have a first class or second class honours BSc degree in a relevant biological or biomedical sciences, physical sciences or engineering field.

**IELTS:** Minimum 6.5 overall score required with no band below 6.0.

**Course Webpages:** [shortened as] [www.bit.ly/chj2Yk](http://www.bit.ly/chj2Yk)

**Application:**

**PAC Code: GYS03**

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

**Course Duration:** 1 year

**Course Outline:** The course provides training in biomedical engineering and focuses on developing advanced technical knowledge and skills for implementation in terms of innovation, commercialization and business development. The programme aims to equip students with biomedical engineering skills for the medical technology industry, and for academic research and teaching. The course combines instruction through taught modules and a significant project-based learning component.

**Indicative Content:** Biomechanics; Biomaterials; Medical and Surgical Practice; Medical Implant and Device Design; Tissue Engineering/Advanced in Engineering Analysis/Advanced Finite Element Methods; Mechanobiology; Non-Linear Elasticity; Partial Differential Equations; Graphics and Image Processing; Bioinstrumentation Design; Embedded Image Processing; Reconfigurable System on a Chip; Stem Cells and Gene Therapy II; Financial Management; Project Management; Lean Systems; Research Methods for Engineers; Technology, Innovation and Entrepreneurship; Human Reliability.

**Admission Requirements:** A minimum 2:2 Honours degree in a Biomedical Engineering or related programme.

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

**Course Webpage:** [shortened as] <https://bit.ly/2OS3qnf>

**Application:**

**PAC Code: GYE24**

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

**C9 MSc in Biotechnology\***

**NUIG**

**Study Location:** NUI Galway

**Course Duration:** 1 year

**Course Outline:** This MSc aims to provide you with the skills and knowledge necessary to pursue a successful career in biotechnology. Through tutorials, lectures, assignments and a research project, the course focuses on the development and application of biological processes in research, commercial and industrial settings. The programme is suitable for applicants who have a primary degree in Biological Sciences and wish to develop a career in a sector of high employment.

**Indicative Content:** Core – Introduction to Business; Fundamental Concepts in Pharmacology; Frontiers in Biotechnology; Protein Technology; Biotechnology Research and Work Experience; Diagnostic Biotechnology. Options – Scientific Writing; Current Methodologies in Biotechnology; Applied Concepts in Pharmacology; Cell & Molecular Biology: Advanced Technologies; Quality Management Systems for Biotechnology; Introduction to Programming for Biologists; Advanced Industrial Processes; Molecular Medicine; Basic and Advanced Immunology.

**Admission Requirements:** Candidates must hold at least a Second Class Honours, Level 8 (or equivalent international qualification) primary degree in Science or a related subject, with a strong background in Biological Sciences.

**IELTS:** Overall score of 6.5 is required, with not less than 5.5 in any one component.

**Course Webpage:** [shortened as] [www.bit.ly/avHELs](http://www.bit.ly/avHELs)

**Application:**

**PAC Code: GYS04**

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

**C10 MSc in Neuropharmacology\***

**NUIG**

**Study Location:** NUI Galway

**Course Duration:** 1 year

**Course Outline:** This course will equip students with the skills necessary to develop a career in important area of research, and aims to provide: a sound theoretical knowledge of neuropharmacology; laboratory-based skills in various neuropharmacological techniques; an appreciation of the regulatory issues associated with conducting neuropharmacological research; the application of experimental design and statistics to neuropharmacological research; a detailed understanding of a range of computer packages involved in data processing and presentation; a research project which will allow these skills to be further developed.

**Indicative Content:** Core: Fundamental Concepts in Pharmacology; Applied Concepts in Pharmacology; Neurophysiology; Central Neurotransmission; Experimental Methods in Pharmacology; Experimental Neuropharmacology; Current Topics in Neuropharmacology; Neuropharmacology & Therapeutics; Neuropharmacology Research Project. Options – Introduction to Toxicology; Screening Molecular Libraries.

**Admission Requirements:** At least a Second Class Honours Level 8 degree from any of a range of undergraduate disciplines, from Chemistry to Life Science subjects to Psychology.

**IELTS:** Overall score of 6.5 is required, with not less than 5.5 in any one component.

**Course Webpage:** [Shortened as] [www.bit.ly/9ddKv5](http://www.bit.ly/9ddKv5)

**Application:**

**PAC Code: GYS11**

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

**C11 MSc in Pharmaceutical Sciences**

**TCD**

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** The M.Sc. in Pharmaceutical Sciences is an integrated multidisciplinary course addressing fundamental and applied aspects of drug and drug product discovery, development, production and analysis. The programme will prepare candidates for research careers in academia and industry in pharmaceutical R&D.

**Indicative Content:** Regulatory aspects and industrial pharmacy; Chromatographic and other separative methods of analysis; Spectroscopic methods for drug analysis; Molecular pharmaceuticals and advanced drug delivery; Analysis of low level drug analytes; Pharmaceutical and medical nanotechnology; Pharmacological and related methods; Analysis of biotech products; Formulation development and evaluation; Research methods in pharmaceutical analysis, analytical method, validation and statistics.

**Admission Requirements:** Applicants are accepted, subject to the availability of places, from holders of honours degrees in a relevant Science discipline (e.g. Pharmacy, Chemistry, Analytical Chemistry, Microbiology, Biochemistry, Pharmacology and other appropriate primary honours degrees e.g. I.T., Medicine or Veterinary). Equivalent primary and/or postgraduate qualifications are considered, particularly with relevant professional experience.

**Course Webpage:** [https://pharmacy.tcd.ie/postgraduate/msc\\_analysis.php](https://pharmacy.tcd.ie/postgraduate/msc_analysis.php)

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

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** This M.Sc. in Immunology includes study of immunological processes and mechanism, how they contribute to disease and how they might be manipulated therapeutically. By focusing on the molecules, cells, organs and genes of the immune system, their interaction and how they are activated and regulated, students will develop a deep understanding of the pathological processes underpinning immune mediated disease and how they might be controlled. The masters course aims to provide students with a well-balanced and integrated theoretical and practical knowledge of Immunology, and to highlight the progress and intellectual challenges in this discipline.

**Indicative Content:** Basic Immunology; Immunological Technologies; Communicating Science and Critical Analysis; Immunogenetics; Microbe Detection and Evasion; Clinical Immunology; Parasite Immunology; Tumour Immunology; Global Infectious Diseases; Immunotherapeutics and Product Development; Dissertation.

**Admission Requirements:** Applicants will normally be required to hold at least Upper Second Class Honours degree (2:1) or higher in Medicine, Veterinary Science, Molecular Biology, Genetics, Immunology, Biochemistry or a related subject.

**Course Webpage:** <https://www.tcd.ie/Biochemistry/postgraduate/msc-immunology.php>

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

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** The MSc in Bioengineering is designed to provide engineers and scientists with the education, training and creative skills needed to practice and focus on important clinical needs in the medical devices industry, or research and clinical institutes.

**Indicative Content:** Biomechanics; Biomaterials; Medical Device Design; Tissue Engineering; Basic Medical Sciences; Research Methods; Research Project; Advanced Medical Imaging; Design/Innovation.

**Admission Requirements:** Applicants will be required to hold a minimum of an upper second class honours degree in engineering, biomedical technology, or a cognate discipline. An interview may also be required.

**Course Webpage:** [shortened as] <https://bit.ly/2wKKBZi>

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

**C14 MSc in Bioengineering – Tissue Engineering Stream****TCD****Study Location:** Trinity College Dublin**Course Duration:** 1 year

**Course Outline:** The MSc in Bioengineering is designed to provide engineers and scientists with the education, training and creative skills needed to practice and focus on important clinical needs in the medical devices industry, or research and clinical institutes.

**Indicative Content:** Core – Biomaterials; Research Methods; Research Project; Current Topics in Cell and Tissue Engineering; Tissue Engineering; Laboratory Techniques in Cell and Tissue Engineering; Biomaterials and Tissue Engineering Project; Design/Innovation. Options – Biomechanics; Advanced Medical Imaging; Basic Medical Sciences.

**Admission Requirements:** Applicants will be required to hold a minimum of an upper second class honours degree in engineering, biomedical technology, or a cognate discipline. An interview may also be required.

**Course Webpage:** [shortened as] <https://bit.ly/2wKKBZi>

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

**C15 MSc in Bioengineering – Medical Device Specialisation Stream****TCD****Study Location:** Trinity College Dublin**Course Duration:** 1 year

**Course Outline:** The MSc in Bioengineering is designed to provide engineers and scientists with the education, training and creative skills needed to practice and focus on important clinical needs in the medical devices industry, or research and clinical institutes.

**Indicative Content:** Core – Biomechanics; Biomaterials; Research Methods; Research Project; Medical Device Design; Current Research Topics and Techniques in Medical Device Design; Design/Innovation. Options – Biomechanics; Advanced Medical Imaging; Basic Medical Sciences.

**Admission Requirements:** Applicants will be required to hold a minimum of an upper second class honours degree in engineering, biomedical technology, or a cognate discipline. An interview may also be required.

**Course Webpage:** [shortened as] <https://bit.ly/2wKKBZi>

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

**C16 MSc in Chemistry – Analysis of Pharmaceutical Compounds\*****UCC****Study Location:** University College Cork**Course Duration:** 1 year

**Course Outline:** The MSc in Analysis of Pharmaceutical Compounds is a one-year course designed to provide you with the theoretical and practical skills for employment in a diverse range of industries that require analytical

expertise. The course curriculum consists of six months of lectures, laboratory practical sessions, career service workshops, industry-based seminars/workshops, site visits to industry and a six-month research project (industry, research institute, aboard).

**Indicative Content:** Modern Analytical Techniques; Chemical Data Analysis and GLP; Separation Science, Sensors and Process Analytical Technology; Materials, Pharmaceutical and Bio-analysis; Practice of Analytical Chemistry; Biopharmaceuticals: Formulation Design; Secondary Processing and Regulatory Compliance; Research Project and Dissertation.

**Admission Requirements:** Candidates must have obtained at least a Second Class Honours degree or equivalent in a subject(s) related to that of the MSc programme. Graduates with equivalent qualifications in related areas of science and technology, or with proven and relevant industrial experience can be considered for places following interview and assessment.

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

**Course Webpage:** <https://www.ucc.ie/en/ckr02/>

**Application:**

**PAC Code: CKR02**

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

**C17 MSc in Biotechnology\***

**UCC**

**Study Location:** University College Cork

**Course Duration:** 1 year

**Course Outline:** The MSc in Biotechnology is a one-year course designed to provide you with the theoretical and practical skills for employment in the industries of biomedical research, biopharmaceuticals, agrochemicals and biotechnology. The course curriculum consists of six months of lectures, laboratory practical sessions, career service workshops, industry-based seminars and a six-month research project.

**Indicative Content:** Advanced Molecular Microbial Biotechnology; Biopharmaceuticals: Formulation Design, Secondary Processing and Regulatory Compliance; Bioprocess Engineering; Cell and Molecular Biology; Functional Foods for Health; Genetic Engineering; Modern Methods in Analytical Chemistry; Plant Genetic Engineering; Research Dissertation and Industry Placement.

**Admission Requirements:** Candidates must have obtained at least a Second Class Honours, Grade I degree or equivalent in a subject(s) related to that of the MSc programme. Graduates with a Second Class Honours Grade II will be considered on a case-by-case basis. Graduates with equivalent qualifications in related areas of science and technology, or with proven and relevant industrial experience can be considered for places following interview and assessment by the Director of the MSc (Biotechnology) Programme.

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

**Course Webpage:** [www.ucc.ie/en/ckr01](http://www.ucc.ie/en/ckr01)

**Application:**

**PAC Code: CKR01**

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

# D

**Engineering, Hydrology,  
Sustainable Technology**

**Study Location:** Cork Institute of Technology

**Course Duration:** 1 year

**Course Outline:** This programme aims to develop advanced analytical, design, assessment, appraisal and research skills in Civil Engineering in the specialist areas of environmental and energy engineering. The programme content seeks to reflect current and likely future practice and trends in environmental and energy engineering analysis, design, and assessment. It aims to provide the graduate with the advanced conceptual understanding, detailed factual knowledge, specialist technical skills, and an overall holistic awareness of the issues involved that are required for success in modern environmental and energy engineering practice.

**Indicative Content:** Core – Sustainability in Engineering; Energy Source Analysis; Advanced Hydro & Flood Control; Engineering Research Skills; Ocean Energy Conversion; Environment and Energy Engineering Infrastructure; Biofuel and Biomass Technology; Project Development; Advanced Water Engineering; Advanced Wastewater Eng. Design; Thesis. Options – Strategic Business Management; Contract Admin/Dispute Resolve; Infrastructure Asset Management; Engineering Project Management.

**Admission Requirements:** A minimum of a Second Class Honours Grade 2 in a professionally accredited Degree Programme in Civil Engineering or a cognate discipline.

**Course Webpage:** <http://www.cit.ie/course/CRCENEN9>

**Application:** Apply directly to the International Office by emailing [international@cit.ie](mailto:international@cit.ie) with an application form, which is available for download at [international.cit.ie/how-to-apply](http://international.cit.ie/how-to-apply).

**Study Location:** Dublin City University

**Course Duration:** 1 year

**Course Outline:** This Programme introduces the use of advanced Computer-Aided Engineering tools and, by experiencing these advanced techniques and software, the graduate will gain a vital edge. It allows the candidate to keep pace with the rapidly changing manufacturing and design sectors. In addition, students can opt for a specialist Major in Sustainable Systems/Energy or Biomedical Engineering.

**Indicative Content:** Entrepreneurship for Engineers; Finite Element Analysis; Heat Transfer and Fluid Mechanics; Product Design, Development & Value Analysis; Advanced FEA; Surface Engineering & Tribology; Computational Thermo-Fluid Dynamics; Research Practice & Methodology; Manufacturing Process Analysis & Tool Design; Manufacturing Systems Simulation; Project.

**Admission Requirements:** An undergraduate degree in Mechanical and/or Manufacturing Engineering with a minimum 2:2 or equivalent.

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

**Course Webpage:** [shortened as] <https://bit.ly/2vPKsFR>

**Application:****PAC Code: DC814**

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

**D3 MSc in Energy Management\*****DIT**

**Study Location:** Dublin Institute of Technology

**Course Duration:** 1 year

**Course 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 and 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:** Standard applications: at least a 2.2 award in an Honours Bachelor of Engineering Degree. Applicants holding a qualification or combination of qualifications deemed by the Institute as being of equivalent standard to the above when taken in conjunction with relevant work experience may also be considered

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

**Course Webpage:** [shortened as] <http://bit.ly/2dgb2gG>

**Application:** Apply via the 'Non-EU Sept Intake' button on the course webpage.

**D4 ME in Sustainable Infrastructure****DIT**

**Study Location:** Dublin Institute of Technology

**Course Duration:** 1 year

**Course Outline:** The programme consists of 12 taught modules and a Research Project module, and focuses, in particular, sustainability, water engineering, numerical techniques, renewable and sustainable technologies and transport planning with options in advanced structural engineering. It provides specialised skills and knowledge in technical design for Sustainable Infrastructure.

**Indicative Content:** Entrepreneurship for Engineers; Innovation and Knowledge Management; Research Methods; Statistical Analysis for Engineers; Introduction to Sustainable Infrastructure; 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; Advanced Structural Design; Structural Analysis & Dynamics and Sustainable Infrastructure Research Project; Dissertation.

**Admission Requirements:** An honours bachelor degree, with a minimum 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.

**Course Webpage:** [shortened as] <https://bit.ly/2MnpNTT>

**Application:** Apply via the 'Non-EU Sept Intake' button on the course webpage.

<b>D5</b>	<b>ME in Sustainable Electrical Energy Systems</b>	<b>DIT</b>
-----------	--	------------

**Study Location:** Dublin Institute of Technology

**Course Duration:** 1 year

**Course Outline:** This programme has been planned in response to a need in Industry for a master's degree programme that addresses the technology of sustainable electrical energy systems and the issues surrounding their integration into electrical power systems.

**Indicative Content:** Core - Research Methods; Entrepreneurship; Statistical Analysis; Innovation and Knowledge Management; Dissertation. Options - Power Electronic Energy Conversion Systems; DSP Platforms; Wind Energy for Electricity Supply; Renewable Energy Technologies; Embedded Generation; Power Systems Analysis 1 and 2; Energy Supply; Gas and Electricity Markets; Energy Conversion Systems.

**Admission Requirements:** A minimum Second Class Honours accredited degree (2.2 grade or higher) in Electrical or Electronic Engineering or a minimum Second Class Honours accredited degree (2.2 grade or higher) in a related engineering discipline e.g. mechanical, mechatronic or energy engineering.

**Course Webpage:** [shortened as] <https://bit.ly/2d1jqBC>

**Application:** Apply via the 'Non-EU Sept Intake' button on the course webpage.

<b>D6</b>	<b>ME in Mechanical Engineering</b>	<b>DIT</b>
-----------	-------------------------------------	------------

**Study Location:** Dublin Institute of Technology

**Course Duration:** 1 year

**Course Outline:** The programme consists of 12 taught modules and a Research Project module. The programme focuses on numerical simulation techniques for structural and fluid-flow analyses, renewable and sustainable energy technologies, and biomechanics while also offering modules on innovation and entrepreneurship.

**Indicative Content:** Entrepreneurship for Engineers; Innovations and Knowledge Management; Research Methods; Statistical Analysis for Engineers; Lean Operations & Continuous Improvement Systems; Finite Element Analysis; Advanced Dynamics with Applied Computer Modelling; Computational Fluid Dynamics; Heat and Mass Transfer; Advanced Energy Engineering Economics; Renewable Energy Engineering; Biomechanics; Research Project.

**Admission Requirements:** An honours bachelor degree, with a minimum attainment of second class honours grade 2, in mechanical engineering or a closely-related engineering discipline (e.g., manufacturing, chemical, energy etc.).

**Course Webpage:** [shortened as] <http://bit.ly/2cU8p7l>

**Application:** Apply via the 'Non-EU Sept Intake' button on the course webpage.

<b>D7</b>	<b>MSc in Electronic and Communications Engineering</b>	<b>DIT</b>
-----------	---	------------

**Study Location:** Dublin Institute of Technology

**Course Duration:** 1 year

**Course Outline:** The aim of this programme is to provide industry with engineers with a high level of in-depth knowledge and expertise in a selected range of advanced topics in Electronic and Communications Engineering. This course will provide graduates with the knowledge and skills set required to work at a high level within the research, design and development divisions of the telecommunications sector and related areas in the electronics industry.

**Indicative Content:** Entrepreneurship for Engineers; Research Methods; Statistical Analysis for Engineers; Innovations and Knowledge Management; VLSI Design; Wireless Systems; Advanced Digital Signal Processing; Microelectronic Materials and Devices; Optoelectronics; Energy Conversion & Use; Research Project.

**Admission Requirements:** A minimum Second Class Honours Bachelor Degree (2.2 grade or higher) in Electronic, Computer or Communications Engineering or a related discipline. Applications from candidates with at least a second class honours degree in Applied Physics or other numerate degree, along with candidates with other 2.2 Honours Bachelor Degrees and suitable strong industrial experience may also be considered strictly on a case-by-case basis.

**Course Webpage:** [shortened as] <https://bit.ly/2dAxdSQ>

**Application:** Apply via the 'Non-EU Sept Intake' button on the course webpage.

<b>D8</b>	<b>MSc in Quantity Surveying</b>	<b>LIT</b>
-----------	----------------------------------	------------

**Study Location:** Limerick Institute of Technology

**Course Duration:** 1 year

**Course Outline:** The programme will enable the learner to specialise in one of three aspects of Quantity Surveying, namely, public sector building, civil engineering and mechanical & electrical engineering. The programme will create a progression opportunity for level 8 undergraduates and other learners with a mix of academic qualifications, relevant professional institute membership and experiential learning gained from working within the built environment.

**Indicative Content:** Core – Project Management; Research Modules. Options – Sustainable Public Building; Sustainable Civil Engineering; Sustainable M&E Engineering.

**Admission Requirements:** An undergraduate degree with a minimum 2:2 or equivalent in a built environment programme.

**Course Webpage:** <http://www.lit.ie/Courses/MScQuantitySurveying/default.aspx>

**Application:** Apply directly to the International Office by emailing [international@lit.ie](mailto:international@lit.ie) with an *LIT International Application Form*, which is available for download at <https://bit.ly/2OH0oBe>.

## D9 Master of Civil Engineering\*

NUIG

**Study Location:** NUI Galway

**Course Duration:** 1 year

**Course Outline:** This course aims to equip Civil Engineers with advanced skills. It is a broad design-focused programme with three primary elements: (i) advanced core modules in Civil Engineering, (ii) modules on transferrable skills/professional development and (iii) an individual capstone research project.

**Indicative Content:** Core – Advanced Structures; Integrated Civil Engineering Design; Civil Engineering Project/Thesis; Computational Methods in Civil Engineering. Options – Design of Sustainable Environmental Systems; Transportation Systems and Infrastructure; Offshore and Coastal Engineering; Energy in Buildings; Hydrology and Water Resources Engineering; Hydrological Modelling; Advanced Applied Mathematics for Engineers; Technology Innovation & Entrepreneurship; Project Management; Financial Management; Strategic Management; Polymer Engineering; Advanced Applied Mathematics for Engineers; Earth Observation and Remote Sensing; Advanced Finite Element Methods.

**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.

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

### Application:

**PAC Code: GYE19**

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

## D10 ME in Energy Systems Engineering\*

NUIG

**Study Location:** NUI Galway

**Course Duration:** 1 year

**Course Outline:** This course 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.

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

**Application:**

**PAC Code: GYE20**

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

**D11 MSc in Water Resources Engineering\***

**NUIG**

**Study Location:** NUI Galway

**Course Duration:** 1 year

**Course 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; Integrated 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.

**Course Webpage:** [shortened as] <https://bit.ly/2nAaLLH>

**Application:**

**PAC Code: GYE23**

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

**D12 MSc in Energy Science**

**TCD**

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** This course is designed for students from science and engineering disciplines who are interested in the science and socio-economics of global energy utilisation. In particular, this course will focus on how that demand is being met and how conventional energy resources and technologies can or cannot be replaced by more sustainable resources and technologies.

**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.

**Course Webpage:** <http://www.tcd.ie/courses/energyscience/>

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

### D13 MSc in Mechanical Engineering

TCD

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course 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 course must normally hold a first or second class, first division honours Bachelor degree in engineering or a cognate discipline.

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

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

### D14 MSc in Environmental Engineering

TCD

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course 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 course 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 course 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 course is oversubscribed.

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

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

**D15 MSc in Structural and Geotechnical Engineering TCD**

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** The MSc in Structural & Geotechnical Engineering at Trinity is a specialist course aimed at engineering graduates who wish to pursue a career at the top level of Structural Engineering or Geotechnical Engineering. The course explores the field of Structural/Geotechnical Engineering addressing the modern challenges in this industry including: sustainability of buildings and structural materials, earthquakes, bridge design, soil-structure interactions, advanced modelling and analysis of structures.

**Indicative Content:** Civil Engineering Management; Research Methodology; Research Dissertation; Geotechnical Engineering; Advanced Structural Analysis; Structured Dynamics and Earthquake Engineering; Bridge Engineering; Advanced Concrete Technology; Soil-Structure Interaction; A Unified Theory of Structures; Concrete Durability and Sustainability; Advanced Theory of Structures.

**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 course is oversubscribed.

**Course Webpage:** [shortened as] <https://bit.ly/2neDGom>

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

**D16 MSc in Sustainable Energy TCD**

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course 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 course 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 course is oversubscribed.

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

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

### D17 MSc in Transport Engineering, Policy & Planning

TCD

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** The MSc in Transport Engineering, Policy and Planning provides education and training to the next generation of Transport Professionals. The course aims to equip students with the skills to address the numerous challenges in the transportation field. The course examines areas of transport policy, planning, design, modelling and analysis. The course 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 course is oversubscribed.

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

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

### D18 MEngSc Sustainable Energy\*

UCC

**Study Location:** University College Cork

**Course Duration:** 1 year

**Course 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.

**Course 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.

**D19 MEngSc in Electrical & Electronic Engineering\***

**UCC**

**Study Location:** University College Cork

**Course Duration:** 1 year

**Course Outline:** The aim of the MEngSc programme is to provide advanced coursework with options for a research element or industrial element, and additional professional development coursework. The MEngSc (EEE) has two stream which include coursework only, coursework with a research project, or coursework with an industrial placement.

**Indicative Content:** Core – Advanced Analogue and Mixed Signal Integrated Circuit Design; Advanced RF Integrated Circuit Design; Advanced VLSI Architectures; Intelligent Sensors and Wireless Sensor Networks; Wireless Communications; Robotics and Mechatronics; Advanced Power Electronics and Electric Drives; Optoelectronics; Adaptive Signal Processing and Advanced Control. Options – Computer Architecture; Biomedical Design; Microsystems; Nanoelectronics; Innovation, Commercialisation and Entrepreneurship; Research Project; Industrial Placement.

**Admission Requirements:** Upper second class honours (2.1 grade) or higher degree in Electrical and/or Electronic Engineering, or equivalent engineering qualification.

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

**Course Webpage:** <https://www.ucc.ie/en/ckr47/>

**Application:**

**PAC Code: CKR47**

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

**D20 MEngSc Structural Engineering\***

**UCD**

**Study Location:** University College Dublin

**Course Duration:** 1 year

**Course 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.

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

**Application:** Apply online via course webpage

## **D21 MSc in Environmental Technology\***

**UCD**

**Study Location:** University College Dublin

**Course Duration:** 1 year

**Course 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.

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

**Application:** Apply online via course webpage

**Study Location:** University College Dublin

**Course Duration:** 1 year

**Course 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.

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

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

**Study Location:** University of Limerick

**Course Duration:** 1 year

**Course Outline:** The course will help develop government policy and economic recovery by producing top quality graduates who can contribute to a smart economy and hasten implementation of green technologies. The course applies an evidence based approach to developing solutions for all system users. Graduates will become technically fluent in selected environmental science theory, policy development, implementation and best practice. This course is suitable for graduates with a primary degree in the Environmental Sciences/Engineering/Economics or Geography/Biological Sciences/Ecology and Earth Sciences who wish to extend their knowledge and skills for a career related to resource management.

**Indicative Content:** NUIG – Ecosystem Assessment; Biodiversity and Conservation; Environmental Problems and Solutions. UL – Material and Energy Flows; Urban Form and Transport; Urban Household Sustainability; Sustainable Life-cycle Engineering; Research Project.

**Admission Requirements:** At least a second class honours primary degree in an appropriate discipline, or equivalent.

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

**Course Webpage:** [shortened as] <http://bit.ly/1QCJSLp>

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

**D24 MSc in Sustainable Energy Engineering**

**WIT**

**Study Location:** Waterford Institute of Technology

**Course Duration:** 1 year

**Course Outline:** This course 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:** Sustainability and the Environment; Personal Effectiveness; Advanced Dynamic Thermal Simulation – Services Systems; Statistical Analysis; Energy Auditing; Dynamic Thermal Simulation – Building Fabric; Building Pathology and Investigation; Building Services Systems; Facilities Management; Passive and Low Energy Building Design; Sustainable Energy Technology; Research Methods; Dissertation.

**Admission Requirements:** Normally a second class honours degree in an engineering related and technical programme such as building services engineering, mechanical engineering, civil engineering, construction management, quantity surveying, architectural technology and architecture. Students from other associated engineering and science disciplines are welcome to apply.

**Course Webpage:** [shortened as] [www.bit.ly/1Qhjj07](http://www.bit.ly/1Qhjj07)

**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.

# **E**

## **Economics, Finance and Accounting**

**E1 MBS in International Accounting****DIT**

**Study Location:** Dublin Institute of Technology

**Course Duration:** 1 Year

**Course Outline:** The MBS in International Accounting is designed to build participants expertise in the areas of accounting, finance, taxation, ethics and research. It will equip its graduates to successfully complete the examinations of the major accounting bodies operating in Ireland.

**Indicative Content:** Financial Reporting; Management Accounting; Finance; Taxation; Auditing; Ethics & Governance; Business Law; Project.

**Admission Requirements:** An honours bachelor degree (2.2 or higher) with accounting constituting a major part. Those who have made timely progress in their professional examinations may also be considered.

**Course Webpage:** [shortened as] [www.bit.ly/2dgQBR7](http://www.bit.ly/2dgQBR7)

**Application:** Apply via the 'Non-EU Sept Intake' button on the course webpage.

**E2 MSc in Accounting and Finance Management****GCD**

**Study Location:** Griffith College Dublin

**Course Duration:** 1 year

**Course Outline:** Students will advance their functional management competencies in finance and accounting, and will develop and refine transferable interpersonal and leadership skills which they can bring to the workplace. Students will also gain the experience of working in culturally diverse teams across a multicultural environment promoting a greater understanding of different business settings and contexts.

**Indicative Content:** Core – Management Accounting and Control; International Strategy; International Financial Management; International Financial Reporting and Analysis; Audit and Assurance; Legal Environment and Corporate Governance; Business Research Methods; Strategic Managerial Finance; Dissertation. Options – Taxation (IRL); International Tax Law; Business Planning and Entrepreneurship; Leadership and Management Development; eBusiness and eMarketing; Technology and Business Innovation.

**Admission Requirements:** Honours degree in the field of accounting and finance (minimum 2:2).

**Course Webpage:** [shortened as] <http://bit.ly/2v5sxHV>

**Application:** Apply online from the course webpage.

**E3 MSc in Economic and Financial Risk Analysis\*****MU**

**Study Location:** Maynooth University

**Course Duration:** 1 year

**Course Outline:** The MSc. Economic and Financial Risk Analysis provides students with international quality training in the fundamental concepts and tools required by the financial sector. The programme emphasises

'problem solving' through a combination of theoretical principles and empirical tools. Successful graduates are equipped with a wide range of economic, financial, quantitative and communication skills.

**Indicative Content:** Core – Microeconomics; Macroeconomics; Fundamental of Econometrics; Econometrics; Financial Economics; Advanced Derivatives; Financial Risk Analysis; Empirical Finance. Options – Thesis; Work Placement.

**Admission Requirements:** At least a 2.1 honours degree at undergraduate level in Finance or Economics, or where Finance formed a substantial component, or where there was a substantial quantitative component, such as Mathematics, Engineering, Computer Science, Maths Physics or Statistics.

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

**Course Webpage:** [shortened as] <https://bit.ly/29LvB1T>

**Application:**

**PAC Code: MHH64**

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

**E4 MSc in Economics\***

**TCD**

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** The MSc in Economics focuses on developing the core technical skills needed to undertake research in economics. It emphasises active and problem-based learning to ensure mastery of the basic skills.

**Indicative Content:** Theories of Consumption and Investment; Economic Growth; Consumption and Production; Game Theory; Econometrics I and II; Monetary Policy and the New Keynesian Business Cycle; International Macroeconomics; International Finance; Development Economics and Experiments; Spatial Economics and Big Data; Topic in Political Economy; Research Project.

**Admission Requirements:** Candidates should normally hold at least an upper second-class honors degree that has a significant quantitative component. Applications are expected from candidates with single or joint honors Economics degrees, Business or BComm degrees with final-year Economics options, and Maths, Physics, Computer Science or Engineering graduates.

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

**Course Webpage:** <https://www.tcd.ie/Economics/postgraduate/msc-economics/>

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

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** This programme is designed to help students develop the skills they need to excel in their chosen career within finance. Highly interactive lessons will provoke discussion and provide opportunities to develop presentation skills, deal with real-life case studies and work in group assignments.

**Indicative Content:** Core – International Financial Statement Analysis; Corporate Finance; Derivatives; Econometrics; Credit and Fixed Income Instruments; Investment Theory; Advanced Statement Analysis; Portfolio and Wealth Management; Dissertation. Sample Options – Financial Markets & Institutions; Trading Psychology & Behavioural Analysis; Panel & Cross Sectional Data Analysis; Enterprise Risk Management; Policy Issues in the International Economic System; Ethical Business; Governance International Tax and NMEs.

**Admission Requirements:** A first or upper second-class honours degree, or equivalent.

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

**Course Webpage:** <https://www.tcd.ie/business/msc/finance/>

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

**Study Location:** University College Cork

**Course Duration:** 1 year

**Course Outline:** This programme involves advanced study of the practices of investment, banking and risk management. The course also involves an applied research project, using cutting-edge techniques and software. The programme is at the top end of graduate study in business/finance in Ireland and is designed for high achievers who wish to pursue high-end careers in financial market.

**Indicative Content:** Fund Management and Evaluation; Fixed Income Securities; Asset Pricing; Securities Valuation and Selection; International Finance; Treasury Risk Management; Financial Institutions and Money Markets; Derivative Securities; Macroeconomics for Financial Markets; Regulation and Compliance in Capital Markets; Applied Econometrics; Applied Time Series Analysis; Research Methods; Applied Research Project.

**Admission Requirements:** Upper second class honours degree (2:1 grade) or higher in a business subject, or in a related subject with a quantitative element such as mathematics, statistics, engineering, science, etc.

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

**Course Webpage:** <https://www.ucc.ie/en/ckl19/>

**Application:**

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

**PAC Code: CKL19**

**Study Location:** University College Cork

**Course Duration:** 1 year

**Course Outline:** This course equips you with the key skills for career development in the ever-changing business world. This is a research-orientated course, which is both theoretically grounded and evidence-based. The focus is on analysing, understanding and explaining business performance in a competitive environment. Through the focused taught courses and conducting your own research, you learn how to explain and apply core theories, empirical methods and a range of analytical tools that are relevant and transferable to a range of fundamental business issues.

**Indicative Content:** Economics of Business Strategy; Analysing General Business Conditions; Financial Economics and Business Strategy; Scenario Analysis and Forecasting for Business Development; Research Methods for Business Economics; Business Survey Methods; Research Workshops and Professional Development; Business Economics Report

**Admission Requirements:** Applicants must have a minimum 2.2 honours grade in a primary degree (or equivalent).

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

**Course Webpages:** [www.ucc.ie/en/ckl06](http://www.ucc.ie/en/ckl06)

**Application:**

**PAC Code: CKL06**

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

**Course Duration:** 1 year

**Course Outline:** This programme is aimed at students who wish to develop a deep understanding of economic principles and an ability to apply these principles in a variety of circumstances. Due to its technical and cumulative nature (where current topics build on material covered in undergraduate programmes), we encourage our students to have strong quantitative skills and to be active, motivated, and autonomous learners.

**Indicative Content:** Core - Macroeconomics; Microeconomics; Econometrics; Preliminary Maths and Stats; Research Skills. Options – Advanced Econometrics; Advanced Macroeconometrics; Advanced Microeconometrics; Behavioural Economics; Energy Economics and Policy; Research and Professional Development; Professional Development; Health and Welfare Economics; Behavioural Economics and Policy Implications; Experiments in Economics; Economics of Competition and Regulatory Policy; Development Economics; Economics Internship; MSc Thesis; Intro to Development Economics; Advanced Issues in European Competition Law; Environmental Economics.

**Admission Requirements:** A primary degree with at least an upper second class honours or international equivalent in Economics, or in another degree that has strong theoretical and quantitative content such as Maths, Physics, Engineering or Computer Science is required.

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

**Course Webpage:** [shortened as] <https://bit.ly/2Nq12Tw>

**Application:** Apply online via course webpage

**E9 MSc in Aviation Finance\***

**UCDMS**

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

**Course Duration:** 1 year

**Course Outline:** The MSc in Aviation Finance aims to advance students understanding of all aspects of aviation finance, with specific focus on the practical features of global aviation markets. It encourages students to develop creative and analytical approaches to problem solving in the aviation finance and leasing sphere and to enhance interpersonal and leadership skills.

**Course Suitability:** It is suitable for graduates from a wide variety of disciplines including business, economics, finance, engineering and science who want to pursue a career in the highly dynamic sector of Aviation Finance & Leasing.

**Indicative Content:** Core – Accounting/FSA for Aviation; Aviation Tax; Aviation Finance 1 and 2; Quantitative Methods; Capital Markets & Instruments; Aviation Economics; Topics in Aviation Finance; Doing Business Globally; Law of Aviation Finance. Options – Aviation Finance Research Project *or* Aviation Industry Internship *or* (choose 2) Advanced Treasury Management; Management of Banking Institutions; Mergers and Acquisitions; Financial Modelling.

**Admission Requirements:** (i) A minimum second-class honours degree (or equivalent) in Business/Commerce (with quantitative subjects), Economics, Finance, Engineering, Mathematics, Physics or a Finance related area; or (ii) A primary degree with a minimum of three years' work experience in the aviation industry.

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

**Course Webpage:** [shortened as] <https://bit.ly/2oDBN5K>

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

**E10 MSc in Finance\***

**UCDMS**

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

**Course Duration:** 1 year

**Course Outline:** This course is especially suitable for graduates with an educational track record in business, economics, finance or any degree with a significant quantitative element. A wide-ranging curriculum develops and tests graduates' comprehension of management principles, market operations and functions, and the risks inherent in investment management, enabling them to comprehend the entire management and strategic contexts in which financial decision-making is taken. Students learn about financial processes and procedures as well as the knowledge and skills (both professional and personal) necessary for a career in financial services, from investment and commercial banks through to insurance companies and trading houses. In the summer term,

students can choose from some summer term modules, or a research project, or in a small number of cases, from a limited number of possible internships.

**Indicative Content:** Core – Financial Econometrics; Derivative Securities; Corporate Financial Management; Quantitative Methods; Capital Markets & Instruments; Financial Asset Valuation; Strategic Finance; Behavioural Finance; Empirical Finance; Portfolio & Risk Management. Options – Advanced Treasury Management; Management of Banking Institutions; Applied Investment Management; Research Project; Mergers & Acquisitions; Financial Modelling; Aircraft Finance.

**Admission Requirements:** Second class honours degree (2:2 grade) or higher in Business/Commerce (with quantitative subjects), Economics, Finance, Engineering, Mathematics, Physics or Finance-related area, or a primary degree with a minimum of three years' work experience in Finance. Admission to this course is usually highly competitive.

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

**Course Webpage:** [shortened as] <http://bit.ly/2ljQRpQ>

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

## E11 MSc in Quantitative Finance\*

UCDMS

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

**Course Duration:** 1 year

**Course Outline:** This course covers a broad range of subjects related to the mathematical modelling of financial markets and the pricing and hedging of financial securities. The course equips you with the necessary theoretical, mathematical and computational skills needed to pursue a career in quantitative finance.

**Indicative Content:** Core – Capital Markets and Instruments; Derivative Securities; Financial Analysis; Financial Econometrics; Financial Theory; Quantitative Methods for Finance; Advance Derivative Securities; Advanced Statistical Computing Methods for Finance; Fixed Income Securities; Numerical Methods; Portfolio & Risk Management. Options – Advanced Treasury Management; Financial Modelling; International Finance; Mergers and Acquisitions; Aircraft Finance; Behavioural Finance; Applied Investment Management (Internship); Research Project.

**Admission Requirements:** Minimum 2:1 undergraduate degree in (i) Business/Commerce to include a number of quantitative subjects such as Economics or Finance, or (ii) a Finance-related-area, Mathematical Finance, Economics, Mathematics, Statistics, 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.

**Course Webpage:** [shortened as] <https://bit.ly/2vMnGhb>

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

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

**Course Duration:** 1 year

**Course Outline:** The programme is designed for top graduates who have majored in business, accounting and finance and who wish to pursue a career in accounting, corporate finance, management consulting, and taxation either within the profession or with local or multinational companies. Our focus is not just on the development of technical skills but also on the development of complex problem-solving, critical thinking and softer people skills.

**Indicative Content:** Core – Financial Reporting; Taxation; Management Accounting; Auditing and Assurance; Accounting Analytics; Advanced Financial Accounting; Business Valuation and Analysis; Professional Development; Integrative Analysis in Accounting. Options – Capstone Project; Taxation Summer School; Corporate Governance and Ethics; The Science of Teams; Current Issues in Accounting Practice; Globalisation and Social Movement.

**Admission Requirements:** A first class honours Business degree or equivalent. Admission to this course is usually highly competitive.

**IELTS:** Minimum 7.5 overall score required with no section less than 6.5.

**Course Webpage:** [shortened as] <https://bit.ly/2OPV0wy>

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

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

**Course Duration:** 1 year

**Course Outline:** As the only Masters in the world covering both energy finance and environmental finance, this course 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. 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.

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

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

**F**

**Management  
and Business**

**Study Location:** Athlone Institute of Technology

**Course Duration:** 1 year

**Course Outline:** This masters in designed for students who have graduated from a broad spectrum of business and related degree programmes who wish to upgrade and enhance their knowledge and skills to avail of global business opportunities. Central to the course design is engagement with external businesses and organisations. You will also gain a deeper understanding of businesses and the environments they operate in, as well as skills such as marketing, strategic analysis and information systems.

**Indicative Content:** International Corporate Strategy; Services Marketing Management; New Venture Creation and Growth; Business Model Development; Information Systems for Managers; Innovation & Creativity; Personal and Professional Development; Research Methods; Research Project.

**Admission Requirements:** Students are expected to have a minimum of a Bachelor Degree in business or a cognate discipline at 2.2 level or an approved equivalent qualification.

**Course Webpage:** <https://www.ait.ie/courses/master-of-business>

**Application:** Application forms can be downloaded at: [www.ait.ie/international/non-eustudents](http://www.ait.ie/international/non-eustudents)  
For enquiries, contact Mary Simpson, AIT International Office - [international@ait.ie](mailto:international@ait.ie) or +353 90 642 4562.

**Study Location:** Cork Institute of Technology

**Course Duration:** 1 year

**Course Outline:** The programme is designed to expose students to current issues in the Human Resource Management domain at a strategic level. This Masters programme has been designed in consultation with industry to respond to changes that have taken place in the HR area. It is aimed at professionals in the Human Resource discipline who wish to further their career and enhance their skillset.

**Indicative Content:** International Corporate Strategy; Professional Employment Law; HRM in Context; Coaching and Mentoring; Applied Corporate Strategy; Employee Engagement; Leading, Managing & Developing; Training Talent & Knowledge Management; Research Methods; Reward & Incentive Management; Sourcing & Testing; Dissertation.

**Admission Requirements:** Bachelor of Arts (Honours) in Human Resource Management at grade H2:2 or higher. Graduates of cognate Honours programmes who have attained HR experience may also be eligible.

**Course Webpage:** <http://www.cit.ie/course/CRBHRMN9>

**Application:** Apply directly to the International Office by emailing [international@cit.ie](mailto:international@cit.ie) with an application form, which is available for download at [international.cit.ie/how-to-apply](http://international.cit.ie/how-to-apply).

**Study Location:** Cork Institute of Technology

**Course Duration:** 1 year

**Course Outline:** Students build upon their own discipline (science, engineering, computing etc) to develop solid understanding of Business Development, Internationalisation and Innovation in an interesting educational environment. Students will expand their business knowledge and skills through simulation, guest speakers and an international trip. Students will also undertake an industry consultancy project which will prepare them for opportunities in the workplace. The programme is an excellent opportunity for students who want to complement their degree with business skills.

**Indicative Content:** Core – Global Marketing Management; Financial Management & Systems for International Business; Innovation; Strategic Thinking; International Selling & Business Development; Sustainable Marketing Practice; Seminar Series; International Study Trip; Economics of Global Markets; Business Environment Simulation; Applied Business Project. Options - People Management Strategies for International Business; Customer Experience Design; Technology Management in Global Business; Digital Environment.

**Admission Requirements:** A minimum 2:2 Honours Degree in a non-cognate area. All areas where the specialism is not business, Marketing, Accounting/Finance or Business Information Systems will be considered

**Course Webpage:** <http://www.cit.ie/course/CRBIBUS9>

**Application:** Apply directly to the International Office by emailing [international@cit.ie](mailto:international@cit.ie) with an application form, which is available for download at [international.cit.ie/how-to-apply](http://international.cit.ie/how-to-apply).

**Study Location:** Cork Institute of Technology

**Course Duration:** 1 year

**Course Outline:** The programme is aimed at those with existing business degrees and develops knowledge & Insight relating to areas that are of particular importance for businesses operating globally. This can include small, medium and large companies who may be involved in the movement and development of goods, service or labour across multiple territories. Skills and knowledge developed relate to operations management, supply chain and logistics, procurement as well as broader themes like strategy and innovation which also underpin success in global business.

**Indicative Content:** Global Competitive Strategies; Operations Strategy; Business Relationship Management; International Business Negotiation; Financial Interpretation; Innovation Practice; Purchasing and Logistics; International Study Trip; Business Simulation; Trade Regulation & Policy; Seminar Series; Placement.

**Admission Requirements:** A minimum 2:2 (or equivalent) in an Honours Degree in a business area.

**Course Webpage:** <http://www.cit.ie/course/CRBGLBP9>

**Application:** Apply directly to the International Office by emailing [international@cit.ie](mailto:international@cit.ie) with an application form, which is available for download at [international.cit.ie/how-to-apply](http://international.cit.ie/how-to-apply).

**Study Location:** Dublin City University

**Course Duration:** 1 year

**Course Outline:** The innovative and distinguishing features of this programme are its focus on international elements of management, its emphasis on enhancing leadership capability, and the importance given to building professional competencies. You will also develop insights into the latest developments in HRM, including cross-cultural management, people management, and the strategic importance of the HR function.

**Indicative Content:** Labour Law; Organisational Analysis; Management Research Report/Dissertation; People Management & Development; Researching HRM; Managing Organisational Learning & Knowledge; Leadership & Career Development; Selection & Assessment; Managing Employee Performance and Reward; International HRM; International Employee Relations; Strategic Human Resource Management.

**Admission Requirements:** A second class honours grade 1 degree (or international equivalent).

**IELTS:** Minimum 6.5 overall score required, with a minimum score of 6.5 in writing and speaking, and a minimum 6.0 in listening and reading.

**Course Webpage:** [shortened as] <https://bit.ly/2L0sN2U>

**Application:**

**PAC Code: DC632**

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

**Study Location:** Dublin City University

**Course Duration:** 1 year

**Course Outline:** The MSc in Management (Business) is designed for people who do not have an undergraduate degree in management or business, but who would like to have a thorough preparation for a career in management. You'll be introduced to the core disciplines of business such as accounting, economics, HRM and marketing, while developing the range of skills necessary to operate successfully in a business environment. These include analytical, technical, team-working, presentation, report writing and communication skills.

**Indicative Content:** Core – Accounting for Business Decision Making; Economics; Finance; Consulting Skills; People Management & Development; Marketing; Data Analytics & Visualisation; Next Generation Management; Business Process Innovation; Technology Management; Business Strategy. Options – Practicum-Applied Research; Dissertation.

**Admission Requirements:** A second class honours grade 1 degree in a discipline other than Business, or an equivalent international qualification. If you have achieved a second class honours grade 2 honours degree in a non-Business discipline, you may still obtain a place. This will depend on the availability of places. You may be invited for interview.

**IELTS:** Minimum 6.5 overall score required, with a minimum score of 6.5 in writing and speaking, and a minimum 6.0 in listening and reading.

**Course Webpage:** [shortened as] <https://bit.ly/2OJ6uB5>

**Application:**

**PAC Code: DC510**

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

**F7 MSc in Strategic Management**

**DIT**

**Study Location:** Dublin Institute of Technology

**Course Duration:** 1 year

**Course Outline:** This programme is suited to high-potential applicants who wish to develop their capabilities in the field of strategic management. The programme is open to recent graduates as well as experienced managers. Graduates of this programme will be well placed to undertake strategic planning for businesses whether they are in the public, private or voluntary sectors.

**Indicative Content:** Core - Strategy and Leadership 1 and 2; Analytical tools for Business Management; Corporate Finance; Business Research Methods; Strategic Marketing; Project and Consultancy Management; Understanding and Leading Organisations. Options - Financial Services; Innovation; Retail Management; Marketing; Human Resources Management; Supply Chain Management, Company Project, Dissertation.

**Admission Requirements:** Graduates in business, economics (or an undergraduate programme where business subjects account for at least 50% of the subjects) who have achieved an Honours degree at grade 2:2 grade or higher.

**Course Webpage:** [shortened as] [www.bit.ly/2cKaR1w](http://www.bit.ly/2cKaR1w)

**Application:** Apply via the 'Non-EU Sept Intake' button on the course webpage.

**F8 MSc in Supply Chain Management**

**DIT**

**Study Location:** Dublin Institute of Technology

**Course Duration:** 1 year

**Course Outline:** The overall learning outcomes of the programme are to provide participants with a detailed knowledge of the theory and practice of SCM, develop graduates to contribute effectively to multi-discipline teamwork aimed at radical improvements in supply chain capability, prepare graduates of all disciplines for a variety of roles in SCM, and provide personal development opportunities for students in parallel with their meeting career development objectives.

**Indicative Content:** Core – Introduction to Supply Chain Management; Research Methods; Understanding Customer Service; Manufacturing Strategy and Operations; Physical Distribution Management; Purchasing; Information Technology in the Supply Chain; Introduction to Business Strategy; Dissertation. Options – Managing People; Management of Information Systems.

**Admission Requirements:** Applications will be assessed based on your academic grades and may also take into account your work/life experience.

**Course Webpage:** [shortened as] <http://bit.ly/2xccNp4>

**Application:** Apply via the 'Non-EU Sept Intake' button on the course webpage.

## F9 MSc in Digital Marketing

ITC

**Study Location:** Institute of Technology, Carlow

**Course Duration:** 1 year

**Course Outline:** This Masters course is designed to help learners identify the strategic implications of digital era marketing and to create and implement effective digital marketing strategies.

**Indicative Content:** Strategic Marketing Management; Digital Marketing Technologies; Digital Marketing Landscape & Strategy; Marketing Communications in a Digital Era; Design, User Experience & Content Writing; Data Analytics & Consumer Insights; Digital Marketing Research Project

**Admission Requirements:** An undergraduate degree with a minimum 2:2 or equivalent in Marketing or a business discipline, Computer Science or cognate courses.

**Course Webpage:** [shortened as] <https://bit.ly/2w9e8Nz>

**Application:** Apply directly to the International Office by emailing [noneuapply@itcarlow.ie](mailto:noneuapply@itcarlow.ie) with an *IT Carlow Non-EU Application Form*, which is available for download at <https://bit.ly/2vSovWB>.

## F10 MSc in Supply Chain Management

ITC

**Study Location:** Institute of Technology, Carlow

**Course Duration:** 1 year

**Course Outline:** This Masters course offers a robust understanding of the concepts and best practices in Supply Chain Management for application in today's global economy.

**Indicative Content:** Lean Manufacturing and Six Sigma; Communications for Supply Chain Professionals; Research Project SCM; Performance Management; Supply Chain Financial Management; Sustainable Supply Chains; Research Methods; Strategic Supply Management; Global Logistics and Technology.

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

**Course Webpage:** [shortened as] <https://bit.ly/2MsyUlz>

**Application:** Apply directly to the International Office by emailing [noneuapply@itcarlow.ie](mailto:noneuapply@itcarlow.ie) with an *IT Carlow Non-EU Application Form*, which is available for download at <https://bit.ly/2vSovWB>.

**Study Location:** Institute of Technology, Carlow

**Course Duration:** 1 year

**Course Outline:** Drawing on best practise from Ireland and abroad, the programme is designed to meet current industry needs and is aimed at developing academic knowledge and practical skills in areas such as IT management, leadership strategies and techniques, IT related project management and tools, operational and resource management of data and information systems, and data security.

**Indicative Content:** Leadership & Strategy; Innovation Management; Technology Integration; Project Management; Information Security Management; Data & Information Systems Management; Vendor & Service Management; Dissertation; Research Methods.

**Admission Requirements:** An undergraduate degree with a minimum 2:2 or equivalent in Computer Science or Electronic Engineering.

**Course Webpage:** [shortened as] <https://bit.ly/2wd1GMz>

**Application:** Apply directly to the International Office by emailing [noneuapply@itcarlow.ie](mailto:noneuapply@itcarlow.ie) with an *IT Carlow Non-EU Application Form*, which is available for download at <https://bit.ly/2vSovWB>.

**Study Location:** Institute of Technology, Carlow

**Course Duration:** 1 year

**Course Outline:** This postgraduate programme brings theory to life through its exciting work placement element and applied learning focus, enabling participants to apply acquired knowledge and competencies in a real-world workplace environment. The industrial placement is of four months duration, from May to August, and affords the student a unique opportunity to implement and reflect on the theories learned on the programme. It will complement the student's education and broaden his/her skill set.

**Indicative Content:** Leadership & Strategy; Corporate Governance, Ethics & Social; Responsibility; Research Methods; Financial Analysis & Investment Appraisal; Dissertation; Strategic Marketing Management; Strategic Human Resource Management; Entrepreneurship & Innovation Management; Communications for Professional Life; Work Placement.

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

**Course Webpage:** [shortened as] <https://bit.ly/2MCJeHO>

**Application:** Apply directly to the International Office by emailing [noneuapply@itcarlow.ie](mailto:noneuapply@itcarlow.ie) with an *IT Carlow Non-EU Application Form*, which is available for download at <https://bit.ly/2vSovWB>.

**Study Location:** Maynooth University

**Course Duration:** 1 year

**Course Outline:** This programme provides key business insights and career management skills to both non-Business graduates and experienced professionals who do not have an undergraduate degree. Through its course content and programme delivery, students access leading business ideas and skills and work alongside managers in the workplace to apply management theory, research, and design business solutions.

**Indicative Content:** International Business; People, Organisation and Society; Strategic Management; Career Planning and Development; Global Operations and Supply Chain Management; Marketing; Financial Management; Actionable Insights Through Research; Placement Project.

**Admission Requirements:** The MSc in Business Management is designed for candidates who do not have a previous Business qualification. Candidates should have a minimum 2.2 grade, honours degree in a non-Business discipline or equivalent.

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

**Course Webpage:** [shortened as] <https://bit.ly/2wWRlhZ>

**Application:**

**PAC Code: MH52D**

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

**Course Duration:** 1 year

**Course Outline:** Students develop a blend of individual competencies necessary to be successful managers, including teamwork, communication, and leadership skills, coupled with organisational level insights into how firms can design strategies and innovate to deliver value for customers. It is suited to both recent graduates interested in developing a graduate management career and experienced managers and entrepreneurs interested in developing the skills and capabilities necessary to develop and implement strategic initiatives and lead organisations.

**Indicative Content:** Innovation; Strategic Management: Tools and Concepts; Digital Business; Career Planning and Development; Leadership; Strategy Live; Financial Management; Actionable Insights Through Research; Placement Project.

**Admission Requirements:** Candidates must hold a Business, Management, or Marketing degree (level 8), or a Business-related degree, having achieved a minimum of a 2.2 honours (or equivalent) overall. Alternatively, you may hold a non-Business degree (minimum 2.2 overall) with at least five years' work experience.

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

**Course Webpage:** [shortened as] <https://bit.ly/2xaNOlc>

**Application:****PAC Code: MH54D**

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

**F15 MA in Human Resource Management****NCI**

**Study Location:** National College of Ireland

**Course Duration:** 1 year

**Course Outline:** This intensive course has been developed in consultation with the Chartered Institute of Personnel and Development (CIPD). The programme aims to develop an in-depth understanding of the core disciplines in the area of human resources (HR). It recognises that HR must operate in challenging and dynamic business environments that are constantly changing and seeks to enable students to deliver effective business solutions that optimise the people resources of their organisation.

**Indicative Content:** People Resourcing; Employment Law; Talent Development; HRM in a Strategic Business Context; Research Methods; Leading and Managing; Mediation and Conflict Management; International HRM; Employee Relations; Dissertation.

**Admission Requirements:** Minimum of a 2:2 honours degree in either a cognate or non-cognate area

**Course Webpage:** [shortened as] <https://bit.ly/1t0SqIE>

**Application:** Download an application form from [www.ncirl.ie/International/How-to-Apply](http://www.ncirl.ie/International/How-to-Apply) and email to [admissions@ncirl.ie](mailto:admissions@ncirl.ie).

**F16 MSc in Management****NCI**

**Study Location:** National College of Ireland

**Course Duration:** 1 year

**Course Outline:** The MSc in Management has been developed to satisfy the demand for courses which combine a strong theoretical foundation with a firm focus on practical application. You will be exposed to the most current schools of thought in disciplines such as international business, finance, marketing, entrepreneurship and strategy. The course also provides a series of elective modules for students to explore other areas of interest or to emphasise their development on a specific area of their choice.

**Indicative Content:** Core – Managing the Organisation; Financial Management; Marketing Management; Research Methods; International Business; Economics for Management; Strategy for Decision Making; Dissertation. Options – Strategic Management of Human Capital; Commercial Law; Corporate Governance Business Ethics & CSR; Contemporary Issues in Global Finance; Entrepreneurship; Services Marketing; Strategic ICT & eBusiness Implementation; Global Value Chain Management; Management of Innovation & Technology; Doing Business on the Cloud; Strategic Project Management; Employment Law.

**Admission Requirements:** Minimum of a 2:2 honours degree in either a cognate or non-cognate area

**Course Webpage:** [shortened as] <https://bit.ly/2HkZ2Jq>

**Application:** Download an application form from [www.ncirl.ie/International/How-to-Apply](http://www.ncirl.ie/International/How-to-Apply) and email to [admissions@ncirl.ie](mailto:admissions@ncirl.ie).

**F17 MSc in International Business**

**NCI**

**Study Location:** National College of Ireland

**Course Duration:** 1 year

**Course Outline:** The MSc in International Business has been specifically designed for those wishing to gain deeper knowledge of the international business environment as both employees or as owner/managers of businesses operating internationally. The course is aimed at anyone following a career path which requires them to step into middle to top management positions in an internationally focused business environment.

**Indicative Content:** Core – Managing the Organisation; Corporate Governance Business Ethics & CSR; Research Methods; MNEs and the Global Business Environment; Marketing in the Global Environment; Contemporary Issues in Global Finance; Economics for Management; Strategy for Decision Making; Dissertation. Options – Services Marketing; Marketing Management; Strategic Management of Human Capital; Employment Law; Commercial Law; Strategic ICT & eBusiness Implementation; Strategic Project Management; Management of Innovation & Technology; Global Value Chain Management; Doing Business on the Cloud.

**Admission Requirements:** Minimum of a 2:2 honours degree in either a cognate or non-cognate area

**Course Webpage:** [shortened as] <https://bit.ly/2KYAfeS>

**Application:** Download an application form from [www.ncirl.ie/International/How-to-Apply](http://www.ncirl.ie/International/How-to-Apply) and email to [admissions@ncirl.ie](mailto:admissions@ncirl.ie).

**F18 MSc in Human Resource Management\***

**NUIG**

**Study Location:** NUI Galway

**Course Duration:** 1 year

**Course Outline:** The programme examines the nature of work and explores industrial relations and human resource management in changing national and international markets. The focus is on the people aspect of business and explores how the relationship between employers and employees can be managed to the best advantage of both parties.

**Indicative Content:** People Management & Development; Employee Relations; Human Resource Development; Dissertation; Research Project; Research Methods; Strategic Management; European Labour Markets; Strategic Modelling; Reward Systems; Industrial Relations and Employment Law; Leadership and Change; HR Consultancy; International Human Resource Management; Equality and Diversity in Employment; Developing Skills for Business Leadership.

**Admission Requirements:** Normally a 2:1 Honours degree (or equivalent) in business, management or a related discipline. Experience is also considered. Additional requirements: (i) A personal statement explaining your reasons for choosing this programme, and (ii) An interview if requested.

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

**Course Webpage:** [shortened as] <http://bit.ly/1ihIIAV>

**Application:**

**PAC Code: GYC02**

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

**F19 MSc in Business Analytics\***

**NUIG**

**Study Location:** NUI Galway

**Course Duration:** 1 year

**Course Outline:** The programme is designed as a specialist course, which assists students in blending their existing talents with the technological skills and business knowledge needed to use and manage big data and business analytics in modern knowledge-based organisations.

**Indicative Content:** Core – Database Systems; Business Applications Programming; Decision Theory & Analysis; Statistical Techniques for Business Analytics; Business Modelling & Analytics; Information Systems Strategy and Innovation; Enterprise Systems; Information Systems Security & Ethics; Advanced Applications Programming; Data Science & Big Data Analytics; Applied Customer Analytics; Business Intelligence with SAP Business; Business Analytics Project (Group Project). Options – Strategic Management; Systems Development & Project Management.

**Admission Requirements:** A minimum 2.2 Honours undergraduate degree (or equivalent). The qualification must include an element of quantitative techniques, for example, graduates of Business Studies, Engineering, Computer Science, other Sciences, Mathematics or other courses that have some quantitative content.

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

**Course Webpage:** [shortened as] <https://bit.ly/2OxAQGR>

**Application:**

**PAC Code: GYC36**

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

**F20 MSc in Management\***

**TCD**

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** Designed primarily for non-business graduates, this programme complements your undergraduate degree and equips you with the management skills necessary to succeed in today's globalised business environment. The course covers all the key facets of management, from managing people to finance to strategic planning and operations.

**Indicative Content:** Financial Management; Marketing Management; Operations Management; Entrepreneurship; Negotiation Theory and Practice; Ethical Business; Strategic Management; Human Resource Management; Work & Wellbeing; Leading Change in a Complex World; The Psychology of Management; Research Methods; Dissertation.

**Admission Requirements:** A first or upper second-class honours degree, or equivalent.

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

**Course Webpage:** <https://www.tcd.ie/business/msc/management/structure.php>

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

<b>F21</b>	<b>MSc in International Management*</b>	<b>TCD</b>
------------	---	------------

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** This programme is designed for those in their early career who have an undergraduate degree in business or a related discipline. We focus on developing young managers who want to pursue international careers. The international cohort of classmates focus on learning cutting-edge global business skills and international management theory. Students will spend a week in Fudan University in Shanghai undertaking a residency programme in Global Business Strategy.

**Indicative Content:** Core – International Business Strategy, Theory; Global Brand Management; Research Methods; Economics for Global Markets; International Entrepreneurship; International Business Strategy, Practice; Cross Cultural Management; International HRM; Dissertation. Options – Project Management; Social Entrepreneurship; Global Supply Chain Management; Ethical Business; International Sales & Marketing; Negotiation Theory; Applied International Strategy.

**Admission Requirements:** A first or upper second-class honours degree, or equivalent.

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

**Course Webpage:** <https://www.tcd.ie/business/msc/intl-management/>

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

<b>F22</b>	<b>MSc in Human Resource Management*</b>	<b>TCD</b>
------------	--	------------

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** The MSc in Human Resource Management is designed for students who do not have a business background. The structure of the programme is designed to build student's knowledge and understanding of human resource management and also provide students great opportunities to go beyond the classroom and empower them to learn Human Resource Management in real organisations. Students are offered the opportunity to conduct either a research dissertation or a company based project which again build students' capability to apply theory into practice.

**Indicative Content:** Human Resource Management; Performance and Rewards Management; Managing Employment Relations; Organisation Design and Development; Developing Skills for Business Leadership; Learning and Development; Managing Diversity in Organisations; Researching Human Resource Management; Human

Resource Management in a Complex World; Strategic and International Human Resource Management; Ethics, Business and Society; Dissertation.

**Admission Requirements:** A first or upper second-class honours degree, or equivalent.

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

**Course Webpage:** <https://www.tcd.ie/business/msc/human-resource-management/>

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

## **F23 MSc in Business Information and Analytics Systems\***

**UCC**

**Study Location:** University College Cork

**Course Duration:** 1 year

**Course Outline:** The MSc BIAS provides students with a specialism in Business Analytics as well as an extensive knowledge of business and IS concepts. At the core of this programme is a selection of topics covering cloud technologies, Business Intelligence and Business Analytics, IT performance management, data management and IT project management. A research project will allow student groups to explore and develop an IT solution to a specific business problem in an area specific to the Business Information and Analytics area.

**Indicative Content:** Cloud Technology; Data Acquisition and Management; Project Management; IT and Organisational Performance; Enterprise Business Processes; Design thinking for the Business Analyst; Business Data Strategy; Data Visualisation; Business Analytics and Business Intelligence; Cognitive Decision Making and DSS.

**Admission Requirements:** A 2.2 primary degree or equivalent, with appropriate information systems or computing technology skills content. You may also be admitted to the course on the basis of extensive practical or professional experience, as deemed appropriate by the Professor of Business Information Systems and the School of Business.

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

**Course Webpage:** <https://www.ucc.ie/en/ckl51/>

**Application:**

**PAC Code: CKL51**

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

## **F24 MSc in Human Resource Management\***

**UCDMS**

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

**Course Duration:** 1 year

**Course Outline:** The programme is accredited by the Chartered Institute of Personnel and Development (CIPD), the leading professional body for HR managers. The MSc Business (HRM) programme is designed to provide a research-led professional education to students wishing to pursue a career in HRM and employment relations. Students will benefit from learning values based on research, independent inquiry and critical but

constructive engagement with major debates and issues. A unique feature of the programme is the opportunity to participate in two exchange programmes, with the ILR School, Cornell University and the EMLS (European Masters in Labour Studies)

**Indicative Content:** Core – Concepts in IR and HRM; Human Resource Management; Research Project: HRM & Business. Options – Employment Law; Managing Conflict in Organisations; Employment Relations in Ireland; Gender Equality & Diversity; Reward Management; International HRM; Developing Competencies for HR; Managing Workplace Learning; Work & Employment in the Global Economy.

**Admission Requirements:** (i) A minimum second-class honours degree (or equivalent) in Business/Commerce/Business Administration, Social Science, Psychology, Economics, Law, Accounting or a related area; or (ii) A primary degree with a minimum of three years' work experience in Human Resources.

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

**Course Webpage:** [shortened as] <http://bit.ly/21whJO6>

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

<b>F25</b>	<b>MSc in Digital Innovation*</b>	<b>UCDMS</b>
------------	-----------------------------------	--------------

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

**Course Duration:** 1 year

**Course Outline:** This full time Masters has been designed to enable technologists and future business leaders to manage IT in business and to drive technology-based innovation in a digital society. It addresses technology-centric transformation in business and society. The careful balance of theory and practice within the course prepares graduates to enter the world of digital innovation and for current professionals to progress further in their career.

**Indicative Content:** Core – Design, Development and Creativity; Skills for Business Enquiry; Managing Strategy and Innovation in a Digital Era; Cultural and Political Perspectives on Managing Technology and Change; Outsourcing and Offshoring; Implementing Digital Projects; Research Project. Options – Knowledge, ICT & Organisation; Global Information Systems; Game Thinking: Games and Play in a Digital World; Economics of IT & Digital Markets. Options from other streams may also be available.

**Admission Requirements:** A minimum second-class honours degree (or equivalent) in any discipline, or a primary degree with a minimum of three years' relevant work experience.

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

**Course Webpage:** [shortened as] <https://bit.ly/2zbkclY>

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

<b>F26</b>	<b>MSc in Digital Marketing*</b>	<b>UCDMS</b>
------------	----------------------------------	--------------

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

**Course Duration:** 1 year

**Course Outline:** This full-time Masters course is aimed at graduates who wish to develop a deep understanding and high level of competence in the application of digital marketing tools and techniques. The careful balance of theory and practice within the course is designed to make graduates fully prepared to enter the digital marketing industry or, in the case of professionals, progress further in their career.

**Indicative Content:** Core – Corporate Marketing Strategy; Consumers in a Digital Age; Consumer Insights & Analytics; Omnichannel Marketing Communications; Digital Marketing Project. Options – Advanced SEO and SEA; Social Media Marketing; Digital Technology & Design; Brand Management in Digital Age; Digital Business Model & eCommerce; eCRM; Advanced Analytics & Big Data; Digital Business Model & eCommerce.

**Admission Requirements:** A minimum second-class honours degree (or equivalent) in Business/Commerce, Marketing, Psychology, Computer Science or a related area, or a primary degree with a minimum of three years' work experience in a Marketing role

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

**Course Webpage:** [shortened as] <https://bit.ly/2OTeYqo>

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

**F27 MSc in Business Analytics\***

**UCDMS**

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

**Course Duration:** 1 year

**Course Outline:** This programme is suitable for graduates from technical disciplines such as Engineering, Computer Science and Mathematics with a talent for and interest in finding mathematical or computer solutions to business problems. It is also suitable for business graduates who have studied Management Information Systems (MIS) subjects. This technically-oriented course hones quantitative and computer techniques to assist students in exploring management issues and supporting decision-making within a business context.

**Indicative Content:** Core – Introduction to Business Analytics; Optimisation in Business; Data Mining; Consulting, Change and Project Management; Hot Topics in Analytics; Capstone Project. Options – Statistics and Simulation Methods; Programming for Analytics; Data Management; Advanced Operations Research; Smart Systems; Decision and Behavioural Analytics; Statistical Learning; Business Intelligence and Visual Analytics.

**Admission Requirements:** A minimum second class honours primary degree (or equivalent) which includes quantitative techniques, including Engineering, Computer Science and other Sciences. Applicants with a Business studies background need to have taken MIS-Management Information Systems subjects, Maths or other quantitative courses. A student may be asked to undertake the GMAT or GRE at the Director's discretion.

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

**Course Webpage:** [shortened as] <https://bit.ly/2EU91mP>

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

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

**Course Duration:** 1 year

**Course Outline:** The curriculum has been co-devised by UCD Smurfit School and UCD School of Agriculture and Food Science in order to offer a unique opportunity to receive the highest quality business training as well as to gain a deep understanding of the food sector. Students will gain advanced knowledge of the factors specific to food effecting the sustainability of food production and the role that innovation can play in the sector. They will also gain an appreciation of the increasingly complex and global environment in which the food business currently operates and the uncertainties and risks attached to food production.

**Indicative Content:** Food Policy; Customer Driven Marketing for the Food Industry; Competitive Strategy in the Global Food Industry; Food Business Innovation; Economics of Food; Supply Chain Management in Global Food Systems; Leadership for Growth in the Food Industry; Group Food Strategy Project.

**Admission Requirements:** A minimum second-class honours degree (or equivalent) in any discipline, or a primary degree with a minimum of three years' work experience

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

**Course Webpage:** [shortened as] <http://bit.ly/1jUoBj5>

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

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

**Course Duration:** 1 year

**Course Outline:** This course includes the areas of banking and finance, marketing, management, Management Information Systems (MIS), law, entrepreneurship, human resource management. It aims to deliver a well-rounded knowledge of the theories, practices and skills of business and management and develop interpersonal, communication and leadership skills. Students are taught to identify and solve business problems in local and international settings.

**Indicative Content:** Business Information Systems Management; Management and Organisational Behaviour; Corporate Finance; Human Resource Management; Accounting Information for Managers; Strategic Management. Global Strategic Marketing; Business Information Systems Management; Business and Financial Environments.

**Admission Requirements:** A minimum second-class honours degree (or equivalent). Applicants who do not meet this entry requirements may be considered on a case by case basis, dependent on work experience and/or other qualifications.

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

**Course Webpage:** [shortened as] <https://bit.ly/2zT5iEE>

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

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

**Course Duration:** 1 year

**Course Outline:** This course offers the perfect match for students with an international background and profile who are seeking to build a business career in today's increasingly globalised market place. It is designed to provide you with the knowledge, skills and competencies required to operate in the global market place. On completing this course, you will be expected to be able to critically appraise the theory and practice of international business and demonstrate your expertise and competence in meeting the challenges and opportunities (professional and personal) of international business.

**Indicative Content:** Core – International Business Management; Cross Cultural Management; Global Marketing; International Financial Management; Global Competitive Strategies; International Business Dissertation. Options – Economics of Entrepreneurship; Project Management; Mindfulness & Resilience at Work; Creativity Innovation & Entrepreneurship; Technology & Innovation Strategies; International Business consultancy Project; Managing Leadership and Coaching Change; Managing Workplace Learning; The Science of Teams; Globalisation and Social Movements; Technology and Innovation Strategy.

**Admission Requirements:** A minimum second-class honours degree (or equivalent) in Business, Commerce, Business Administration, International Economics (where a number of business modules were taken in that Economics degree) or a closely related area, or a primary degree with a minimum of three years' relevant work experience.

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

**Course Webpage:** [shortened as] <https://bit.ly/2EcXM8w>

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

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

**Course Duration:** 1 year

**Course Outline:** This course prepares you for a career in management of projects in different industries and types of organisations. Real-life case examples and group projects are used as examples to reinforce your understanding. You will also be given the opportunity to carry out projects with various types of organisations and experience the reality of achieving the project goals and managing different stakeholders, using the knowledge as well as tools and techniques acquired during the course.

**Indicative Content:** The Project Management Lifecycle; Projects and Organisational Dynamics; Projects & Organisational Dynamics; Project Scope and Feasibility Evaluation; Procurement and Contract Management; Project Management Tools and Techniques; Research Report.

**Admission Requirements:** A minimum second-class honours degree (or equivalent) in Business / Commerce, Computer Science, Engineering, Social Science, Economics, Science, Physics, Architecture or a related discipline, or a primary degree (or equivalent) with a minimum of three years' relevant business work experience. Admission to this course is usually highly competitive.

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

**Course Webpage:** [shortened as] <https://bit.ly/2JPB6Cf>

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

**F32 MSc in Supply Chain Management\***

**UCDMS**

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

**Course Duration:** 1 year

**Course Outline:** The course offers both a solid academic grounding in the concepts and practices of Supply Chain Management and direct contact with the experience and expertise of professionals from the field.

**Indicative Content:** Core – Supply Chain Sustainability; Supply Chain Operations; Procurement & Supplier Management; Negotiation for Supply Chain Managers; Supply Chain Analytics; Project and Supply Chain Management; Supply Chain Consulting Report. Options – Managing, Leading and Coaching Change; Cross-Cultural Management; Leadership & Team Management.

**Admission Requirements:** A minimum second-class honours degree (or equivalent) in any discipline, or a primary degree with a minimum of three years' work experience in Supply Chain Management.

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

**Course Webpage:** [shortened as] <https://bit.ly/2M9Sxi8>

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

**F33 MSc in Project Management\***

**UL**

**Study Location:** University of Limerick

**Course Duration:** 1 year

**Course Outline:** This course aims develop knowledge and understanding of the theories and principles of modern approaches to managing projects. Learners will gain skills in critically analysing and engaging actively in the development and integration of project management as a way of work within organisations. Competencies to manage groups and teams and to interact effectively with project stakeholders will be developed and project management best practice in managing human, physical and financial resources throughout the project lifecycle will be studied. The concepts and theories of corporate and social responsibility will be introduced to provide a framework for planning and evaluating the actions and performance of a project in the context of sustainable and socially responsible activity.

**Indicative Content:** Knowledge and Information Management in Project Environments; Project Management Science and Principles; Strategy Formulation and Implementation; Project Planning and Control; People and Behaviour in Projects; Decision Analysis and Judgement in Projects; Research in Projects and Organisations; Commercial Management of Projects; International Project Management; Project Leadership & Governance; Project Management Simulation; Research Project or Confirmation Paper.

**Admission Requirements:** Minimum of 2:2 honours primary degree or equivalent in a project management related field, such as engineering, science, business, information technology, public administration, health and education. Candidates may be selected for interview to determine suitability.

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

**Course webpage:** [www.ul.ie/graduateschool/course/project-management-msc](http://www.ul.ie/graduateschool/course/project-management-msc)

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

<b>F34</b>	<b>MA in Business Management*</b>	<b>UL</b>
------------	-----------------------------------	-----------

**Study Location:** University of Limerick

**Course Duration:** 1 year

**Course Outline:** This course covers the fundamental business disciplines: accounting, business communications, economics, human resource management, information management, knowledge management, management principles, marketing management, organisational behaviour and strategic management.

**Indicative Content:** Economics for Business; Management Principles; Information Management; Organisational Behaviour; Marketing Management; Financial Management and Decision Making; Knowledge Management; Business Communication; Human Resource Management; Strategic Management; Business Simulation; MA Confirmation Paper.

**Admission Requirements:** Minimum of a 2:2 Honours primary degree in any field other than Business or Commerce related fields, or equivalent.

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

**Course Webpage:** [shortened as] [www.bit.ly/17TW06w](http://www.bit.ly/17TW06w)

**Application:** Apply online from the course webpage

<b>F35</b>	<b>Masters in Business Studies (MBS) – Human Resource Management*</b>	<b>WIT</b>
------------	---	------------

**Study Location:** Waterford Institute of Technology

**Course Duration:** 1 year

**Course Outline:** This course provides students with the opportunity to greatly enhance their specialist subject knowledge, experience innovative learning methods and explore opportunities arising from innovation, change and business development. Students achieve this through participation in class activities and through involvement in a series of events including those organised by the Chartered Institute of Personnel and Development (CIPD). Our School is an accredited centre for the CIPD professional body and the MBS Human Resource Management awards CIPD graduate accreditation which is a global qualification. A key feature of this programme is that it sets the theories into a wider practical perspective, through the use of case studies, state of the art technology and visiting staff who are experienced and respected practitioners.

**Indicative Content:** innovation Management and Design; Business Simulation 1; Seminar Series; Research Methods; Contemporary Issues in HR; Employee Relations Strategy; Employment Law; Business Simulation 2;

International Study Tour; Leadership Development; Quantitative Research Methods or Qualitative Research Methods; HR Consultancy; Strategic International HRM; Dissertation.

**Admission Requirements:** A H1 or 2.1 overall award in a strong specialist business human resource management undergraduate degree or a general business undergraduate degree with a HRM major/specialism.

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

**Course Webpage:** [shortened as] [www.bit.ly/1ecy6th](http://www.bit.ly/1ecy6th)

**Application:**

**PAC Code: WD509**

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

**N**

**Information Systems &  
Communication  
Technology**

**Study Location:** Athlone Institute of Technology

**Course Duration:** 1 year

**Course Outline:** Students will develop their skills in areas including database technologies, data manipulation languages including SQL and the R programming language. In order to understand the data, a range of techniques will be taught, including programming for Big Data, statistics and probabilities and the interpretation of data. Interwoven within these modules is the use of industry-standard data analytics software tools.

**Indicative Content:** Relational Databases in the Era of Big Data; Programming for Big Data; Data Analytics; Statistics for Data Analysis; Data Driven Decision Making; Advanced Analytics; Research Methods; Databases for Big Data; Data Visualisation; Industry-led Project.

**Admission Requirements:** An honours degree in Business, Science or Engineering, with a minimum grade of 2.1 (60%), comprising of at least 30 ECTS credits in any combination of maths, computer science or engineering.

**Course Webpage:** <https://www.ait.ie/courses/master-of-business>

**Application:** Application forms can be downloaded at: [www.ait.ie/international/non-eustudents](http://www.ait.ie/international/non-eustudents)  
For enquiries, contact Mary Simpson, AIT International Office - [international@ait.ie](mailto:international@ait.ie) or +353 90 642 4562.

**Study Location:** Athlone Institute of Technology

**Course Duration:** 1 year

**Course Outline:** The aim of this programme is to provide an opportunity for computer professionals and engineers to enhance their knowledge and expertise in areas of current active research and development in software engineering. Participants gain exposure to the various techniques for performing academic research. The course also aims to provide an environment in which the participant is exposed to new technological developments, to ethical and social issues affecting the computer industry, and to the requirement to uphold general professional standards.

**Indicative Content:** Software Engineering Project; Software Design; Data Science; Service-oriented Architecture; Agile Build and Delivery; Database Systems; Computer Networks and Telecommunications; Data Visualization; Rich Internet Applications.

**Admission Requirements:** Honours (Grade 2.2) degree in an appropriate engineering, computing or cognate discipline, or an equivalent qualification. Appropriate experience (or appropriate qualifier) may also be required depending upon the degree qualifications.

**Course Webpage:** [shortened as] <https://bit.ly/2PuhfZm>

**Application:** Application forms can be downloaded at: [www.ait.ie/international/non-eustudents](http://www.ait.ie/international/non-eustudents)  
For enquiries, contact Mary Simpson, AIT International Office - [international@ait.ie](mailto:international@ait.ie) or +353 90 642 4562.

**Study Location:** Cork Institute of Technology

**Course Duration:** 1 year

**Course Outline:** This programme aims to fill the ever increasing skills gap in the area of information security and delivers material that follows the most current practice. Upon successful completion of this programme the student will both understand and deploy the most advanced methods to protect information at rest, in transit, and at work.

**Indicative Content:** Core - Incident Response and Digital Forensics; Security Management and Law; Applied Cryptography; Web Application and Network Penetration Testing; Networking Security & Forensics; Scripting for System Administrators; Information Security Research Project. Options - Cloud Security; Data Analytics; Malware Investigations; Malware Reverse Engineering; Threat Intelligence; Software Security;

**Admission Requirements:** A minimum of an Honours Degree in Computing or in a cognate discipline.

**Course Webpage:** <http://www.cit.ie/course/CRKINF59>

**Application:** Apply directly to the International Office by emailing [international@cit.ie](mailto:international@cit.ie) with an application form, which is available for download at [international.cit.ie/how-to-apply](http://international.cit.ie/how-to-apply).

**Study Location:** Cork Institute of Technology

**Course Duration:** 9 months

**Course Outline:** This programme aims to produce AI engineers with a highly relevant skillset in AI topics. Students will learn how to use and develop intelligent computer systems that can learn from experience, recognise patterns in vast amounts of data and reason strategically in complex decision-making situations. The programme content will deliver a comprehensive range of topics integral to the study of AI. Students will be presented with opportunities to work on industry focused projects and research opportunities linked to the domain expertise of each lecturer.

**Indicative Content:** Core – Practical Machine Learning; Knowledge Representation; Metaheuristic Optimisation; Big Data Processing; Research Practice & Ethics; Deep Learning; Decision Analytics; Research Project. Options – Natural Language Processing; Recommender Systems; AI for Sustainability; Computer Simulation & Analysis; Robotics & Autonomous Systems; Planning and Scheduling; Fraud and Anomaly Detection.

**Admission Requirements:** A minimum second-class honours degree in Computer Science, Computing, Electrical/Electronic Engineering or a cognate discipline. Furthermore, all successful applicants are required to have a proficiency in mathematics, including statistics, and an advanced level of coding competency in a modern high-level computer programming language.

**Course Webpage:** <http://www.cit.ie/course/CRKARIN9>

**Application:** Apply directly to the International Office by emailing [international@cit.ie](mailto:international@cit.ie) with an application form, which is available for download at [international.cit.ie/how-to-apply](http://international.cit.ie/how-to-apply).

**Study Location:** Cork Institute of Technology

**Course Duration:** 15 months

**Course Outline:** In Semester 1, the learner acquires the necessary foundation in Mathematics, Statistics and Computer Science. From Semester 2, the specialisation into the “Big Data” space takes effect, and the learning experience is geared specifically for the realisation of Level 9 programme outcomes. In Semester 3, the learner undertakes a 30 credit capstone project module, in which they apply the knowledge, skills and competences acquired in the taught modules to the research and development of a Data Science problem, and successfully complete the project in accordance with a project plan.

**Indicative Content:** Data Science and Analytics; Mathematical Methods and Modelling; Data Management Systems; Unstructured Data & Visualisation; Analytical and Scientific Programming; Applied Stats & Probability; Statistical Data Analysis; Data Visualisation & Analytics; Distributed Data Management; Time Series & Factor Analysis; Applied Machine Learning; Research Methods; Research Project.

**Admission Requirements:** A minimum 2:1 honours degree. Alternatively, graduates with a 2:2 Honours degree will be considered, subject to having three years relevant experience.

**Course Webpage:** <http://www.cit.ie/course/CRSDAAN9>

**Application:** Apply directly to the International Office by emailing [international@cit.ie](mailto:international@cit.ie) with an application form, which is available for download at [international.cit.ie/how-to-apply](http://international.cit.ie/how-to-apply).

**Study Location:** Dublin City University

**Course Duration:** 1 year

**Course Outline:** The MSc in Computing offers a choice of Majors, designed to equip graduates with a range of cutting-edge skills, enabling them to produce high-quality software and systems that deliver solutions to business and the economy. The Data Analytics major provides students with a deep understanding of the issues, techniques and tools to examine large amounts of raw data in order to extract meaningful conclusions from the information these contain.

**Indicative Content:** Research/Professional Skills; Cloud Architectures; Data Management and Visualisation; Statistical Data Analysis; Machine Learning; Data Analytics and Data Mining; Mathematical Methods/Computational Science.

**Admission Requirements:** The entry requirements for this programme is a 2:1 or higher in computer science or related discipline.

**Course Webpage:** [shortened as] <http://bit.ly/2uYqElN>

**Application:**

**PAC Code: DC836**

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 course webpage.

**Study Location:** Dublin City University

**Course Duration:** 1 year

**Course Outline:** The MSc in Computing offers a choice of Majors, designed to equip graduates with a range of cutting-edge skills, enabling them to produce high-quality software and systems that deliver solutions to business and the economy. This major investigates fundamental issues relating to cloud architecture, cloud security, data mining and networks.

**Indicative Content:** Core – Research/Professional Skills; Cloud Architectures; Concurrent Programming; Cloud Technologies; Network Security. Options – Systems Software; Cryptography & Number Theory; Secure Programming; Data Management and Visualisation; Formal Methods; Machine Learning.

**Admission Requirements:** The entry requirements for this programme is a 2:1 or higher in computer science or related discipline.

**Course Webpage:** [shortened as] <http://bit.ly/2uYqEln>

**Application:**

**PAC Code: DC836**

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 course webpage.

**Study Location:** Dublin City University

**Course Duration:** 1 year

**Course Outline:** The MSc in Computing offers a choice of Majors, designed to equip graduates with a range of cutting-edge skills, enabling them to produce high-quality software and systems that deliver solutions to business and the economy. The Software Engineering major will equip software engineering professionals with additional cutting-edge skills to produce high-quality software and systems that deliver value to business and the economy.

**Indicative Content:** Core – Research/Professional Skills; Systems Software; Formal Methods; Concurrent Programming; Software Process Quality. Options – Secure Programming; Data Management and Visualisation; Cryptography and Number Theory; Cloud Architecture; Cloud Technology; P-Key Cryptography & Security Protocols.

**Admission Requirements:** The entry requirements for this programme is a 2:1 or higher in computer science or related discipline.

**Course Webpage:** [shortened as] <http://bit.ly/2uYqEln>

**Application:**

**PAC Code: DC836**

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 course webpage.

**Study Location:** Dublin City University

**Course Duration:** 1 year

**Course Outline:** The MSc in Computing offers a choice of Majors, designed to equip graduates with a range of cutting-edge skills, enabling them to produce high-quality software and systems that deliver solutions to business and the economy. This major focuses on security of all software systems and attacks the problem through emphasising preventive approaches. The programme's dual approach studies system fundamentals and cryptographic methods, as well as exploring forensic investigative techniques.

**Indicative Content:** Research/Professional Skills; Cryptography and Number Theory; Secure Programming; Systems Software; Forensic Computing; P-Key Cryptography & Security Protocols; Formal Methods; Network Security.

**Admission Requirements:** The entry requirements for this programme is a 2:1 or higher in computer science or related discipline.

**Course Webpage:** [shortened as] <http://bit.ly/2uYqElN>

**Application:**

**PAC Code: DC836**

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 course webpage.

**Study Location:** Dublin City University

**Course Duration:** 1 year

**Course Outline:** This programme is at the highest European Master's degree level. It offers advanced-level courses in the theory, analysis, design, modelling and manufacturing of electronic and computer systems.

**Indicative Content:** Choose any 8 of the following modules - Object-oriented Programming for Engineers; Communications Theory; Wireless and Mobile Communications; Image Processing & Analysis with Project; Solid-State Electronics and Semiconductor Devices; Network Performance; Data Network Protocols: Analysis and Simulation; Data Analysis & Machine Learning; Real-Time Digital Signal Processing; Renewable Energy: Systems, Technology and Economics; HDL/High Level Logic Synthesis; Fundamentals of Nanoelectronics Technology; Web Application Development; Bioelectronics; Optical Communications System Design; Mechatronic System Simulation & Control; Transmission Lines, RF Propagation & Radio Link Design; 3D Interface Technologies; Fundamentals of Photonic Devices; Entrepreneurship for Engineers; Fundamentals of Device Manufacturing; Connected Embedded Systems; Network Analysis & Dimensioning; Secure Sys Admin and Internetwork Security; Computer Vision; Network Stack Implementation.

**Admission Requirements:** A Primary Honours degree with an award of H2:2 or higher in Electronic/Electrical/Computer Engineering, Applied Physics, Computer Sciences or other Engineering disciplines.

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

**Course Webpage:** [shortened as] <https://bit.ly/2wbv85J>

**Application:****PAC Code: DC883**

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

**G11 MEng in Electronic and Computer Engineering (Nanotechnology)\*****DCU****Study Location:** Dublin City University**Course Duration:** 1 year

**Course Outline:** This programme is at the highest European Master's degree level. It offers advanced-level courses in the theory, analysis, design, modelling and manufacturing of electronic and computer systems. This Major focuses on the skills and knowledge required to produce functional electronic and photonic devices and constituent structures of nanometre dimensions. It will also provide graduates with expertise in modern semiconductor manufacturing practices, methodologies and technologies.

**Indicative Content:** Core – HDL/High Level Logic Synthesis; Fundamentals of Nanoelectronics Technology; Web Application Development; Bioelectronics; Fundamentals of Device Manufacturing; Nanotechnology Project. Options – Object-oriented Programming for Engineers; Communications Theory; Wireless and Mobile Communications; Image Processing & Analysis with Project; Solid-State Electronics and Semiconductor Devices; Network Performance; Data Network Protocols: Analysis and Simulation; Data Analysis & Machine Learning; Real-Time Digital Signal Processing; Renewable Energy: Systems, Technology and Economics; Optical Communications System Design; Mechatronic System Simulation & Control; Transmission Lines, RF Propagation & Radio Link Design; 3D Interface Technologies; Fundamentals of Photonic Devices; Entrepreneurship for Engineers; ; Connected Embedded Systems; Network Analysis & Dimensioning; Secure Sys Admin and Internetwork Security; Computer Vision; Network Stack Implementation.

**Admission Requirements:** A Primary Honours degree with an award of H2:2 or higher in Electronic/Electrical/Computer Engineering, Applied Physics, Computer Sciences or other Engineering disciplines.

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

**Course Webpage:** [shortened as] <https://bit.ly/2vLk9AO>

**Application:****PAC Code: DC883**

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

**G12 MEng in Electronic and Computer Engineering (Advanced Data Networks)\*****DCU****Study Location:** Dublin City University**Course Duration:** 1 year

**Course Outline:** This programme is at the highest European Master's degree level. It offers advanced-level courses in the theory, analysis, design, modelling and manufacturing of electronic and computer systems. Graduates of this Major will be equipped with the skills and expertise required to implement tomorrow's networking protocols on network devices and user equipment. Indicative topics covered are wireless networking, mesh networks, peer-to-peer networking, sensor networks, and future technologies in these areas.

**Indicative Content:** Core – Network Performance; Data Network Protocols: Analysis and Simulation; Network Analysis & Dimensioning; Network Stack Implementation; Networks Project. Options – Object-oriented Programming for Engineers; Communications Theory; Wireless and Mobile Communications; Image Processing & Analysis with Project; Solid-State Electronics and Semiconductor Devices; Data Analysis & Machine Learning; Real-Time Digital Signal Processing; Renewable Energy: Systems, Technology and Economics; Optical Communications System Design; Mechatronic System Simulation & Control; Transmission Lines, RF Propagation & Radio Link Design; 3D Interface Technologies; Fundamentals of Photonic Devices; Entrepreneurship for Engineers; Connected Embedded Systems; Secure Sys Admin and Internetwork Security; Computer Vision; HDL/High Level Logic Synthesis; Fundamentals of Nanoelectronics Technology; Web Application Development; Bioelectronics; Fundamentals of Device Manufacturing; Nanotechnology Project.

**Admission Requirements:** A Primary Honours degree with an award of H2:2 or higher in Electronic/Electrical/Computer Engineering, Applied Physics, Computer Sciences or other Engineering disciplines.

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

**Course Webpage:** [shortened as] <https://bit.ly/2vLk9AO>

**Application:**

**PAC Code: DC883**

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

<b>G13</b>	<b>MEng in Electronic and Computer Engineering (Internet of Things)*</b>	<b>DCU</b>
------------	--	------------

**Study Location:** Dublin City University

**Course Duration:** 1 year

**Course Outline:** This programme is at the highest European Master’s degree level. It offers advanced-level courses in the theory, analysis, design, modelling and manufacturing of electronic and computer systems. This Major will provide graduates with knowledge, skills and competencies in the areas of real-time signal processing, data analysis and machine learning, connected embedded systems and network programming.

**Indicative Content:** Core – Connected Embedded Systems; Data Analysis & Machine Learning; Real-Time Digital Signal Processing; Network Stack Implementation; IoT Project. Options – Object-oriented Programming for Engineers; Communications Theory; Wireless and Mobile Communications; Image Processing & Analysis with Project; Solid-State Electronics and Semiconductor Devices; Renewable Energy: Systems, Technology and Economics; Optical Communications System Design; Mechatronic System Simulation & Control; Transmission Lines, RF Propagation & Radio Link Design; 3D Interface Technologies; Fundamentals of Photonic Devices; Entrepreneurship for Engineers; Secure Sys Admin and Internetwork Security; Computer Vision; HDL/High Level Logic Synthesis; Fundamentals of Nanoelectronics Technology; Web Application Development; Bioelectronics; Fundamentals of Device Manufacturing; Network Performance; Data Network Protocols: Analysis and Simulation; Network Analysis & Dimensioning.

**Admission Requirements:** A Primary Honours degree with an award of H2:2 or higher in Electronic/Electrical/Computer Engineering, Applied Physics, Computer Sciences or other Engineering disciplines.

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

**Course Webpage:** [shortened as] <https://bit.ly/2vLk9AO>

**Application:**

**PAC Code: DC883**

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

**G14 MEng in Electronic and Computer Engineering (Image Processing & Analysis)\* DCU**

**Study Location:** Dublin City University

**Course Duration:** 1 year

**Course Outline:** This programme is at the highest European Master’s degree level. It offers advanced-level courses in the theory, analysis, design, modelling and manufacturing of electronic and computer systems. Image & video analysis is a core skill currently driving much of the recent AI advances by both leading multinationals and innovative startups. This major will address this ever popular skill set by modules that cover traditional signal processing, data analytics, feature extraction, machine learning and the highly sought after core expertise of deep learning for computer vision.

**Indicative Content:** Core – Entrepreneurship for Engineers; Computer Vision; Data Analysis & Machine Learning; Real-Time Digital Signal Processing; Image Processing Project. Options – Object-oriented Programming for Engineers; Communications Theory; Wireless and Mobile Communications; Image Processing & Analysis with Project; Solid-State Electronics and Semiconductor Devices; Renewable Energy: Systems, Technology and Economics; Optical Communications System Design; Mechatronic System Simulation & Control; Transmission Lines, RF Propagation & Radio Link Design; 3D Interface Technologies; Fundamentals of Photonic Devices; Secure Sys Admin and Internetwork Security; HDL/High Level Logic Synthesis; Fundamentals of Nanoelectronics Technology; Web Application Development; Bioelectronics; Fundamentals of Device Manufacturing; Network Performance; Data Network Protocols: Analysis and Simulation; Network Analysis & Dimensioning; Connected Embedded Systems; Network Stack Implementation.

**Admission Requirements:** A Primary Honours degree with an award of H2:2 or higher in Electronic/Electrical/Computer Engineering, Applied Physics, Computer Sciences or other Engineering disciplines.

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

**Course Webpage:** [shortened as] <https://bit.ly/2vLk9AO>

**Application:**

**PAC Code: DC883**

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

**G15 MSc in Computing (Data Analytics)\* DIT**

**Study Location:** Dublin Institute of Technology

**Course Duration:** 14 months

**Course Outline:** This programme is designed to create hybrid technologists to work in the growing and important area of data analytics. Data analytics is the science of extracting actionable insight from large amounts of raw data. Hybrid technologists are graduates equipped with deep technical skills (in data management, data mining, probability and statistics, and machine learning), but also with the softer skills (in communications, research and problem solving) required to work effectively within organisations.

**Indicative Content:** Core - Probability & Statistical Inference; Machine Learning; & Database Design for Data Analytics; Data Management; Data Mining; Visualisation; Problem Solving, Communication and Innovation; Case Studies in Computing; Research Writing & Scientific Literature; Methods and Proposal Writing. Options - Geographic Information Systems; Spatial Databases; Ubiquitous Computing; Universal Design; Man and Machine; Bioinformatics; Programming for Big Data.

**Admission Requirements:** Minimum 2.1 honours degree (or 2.2 with at least 2 years of relevant work experience) in Computer Science, Mathematics or other suitably numerate discipline with computing as a significant component.

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

**Course Webpage:** [shortened as] <http://bit.ly/2a6jTA4>

**Application:** Apply via the 'Non-EU Sept Intake' button on the course webpage.

<b>G16 MSc in Computing (Advanced Software Development)*</b>	<b>DIT</b>
--	------------

**Study Location:** Dublin Institute of Technology

**Course Duration:** 14 months

**Course Outline:** This programme aims to produce graduates with the knowledge and skills to develop the complex software solutions that organizations need to compete in the emerging global digital economy. The target audience is those with an undergraduate qualification in computer science or software development. Students will study advanced technical modules in programming, design, databases, architecture and web development to acquire the advanced technical skills needed to practice as software developers working on leading edge development projects. In addition students will be equipped with key professional, technical communications skills needed to practice as a professional in the computing industry.

**Indicative Content:** Core - Probability & Statistical Inference; Machine Learning; & Database Design for Data Analytics; Data Management; Data Mining; Visualisation; Problem Solving, Communication and Innovation; Case Studies in Computing; Research Writing & Scientific Literature; Methods and Proposal Writing. Options – Geographic Information Systems; Spatial Databases; Ubiquitous Computing; Universal Design; Man and Machine; Bioinformatics; Programming for Big Data.

**Admission Requirements:** Minimum 2.1 honours degree (or 2.2 with at least 2 years of relevant work experience) in Computer Science, Mathematics or other suitably numerate discipline with computing as a significant component.

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

**Course Webpage:** [shortened as] <http://bit.ly/2dMrYvy>

**Application:** Apply via the 'Non-EU Sept Intake' button on the course webpage.

**Study Location:** Griffith College Dublin

**Course Duration:** 1 year

**Course Outline:** The Master of Science has been designed to give students an insight into the world of academic and industrial computing research. Students will also develop the skills to carry out innovative work and will gain the ability to research and master technical issues, to analyse and present findings coherently, and to document their work in a professional manner.

**Indicative Content:** Algorithm Design and Analysis; Cloud Computing; Concurrent and Parallel Programming; Communication Security; Dissertation/Dissertation by Practice; Information Retrieval and Web Search; New and Emerging Technologies; Research Methods; Telecommunications and Network Services; Dissertation.

**Admission Requirements:** Candidates applying for this course should have a 2:2 honours degree in Computing Science, or a 2:2 Higher Diploma in Computing or related discipline or international equivalent and/or relevant work experience.

**Course Webpage:** [shortened as] <http://bit.ly/2xiSCoA>

**Application:** Apply via the course webpage.

**Study Location:** Griffith College Dublin

**Course Duration:** 1 year

**Course Outline:** This MSc degree course takes students through the skills needed to produce professional media work to the highest standards. The relevant professional applications will be taught in a 'learn by doing' format and students will leave the programme with a portfolio of their practical work. In photography, video, audio, animation, the Internet itself, in design and in multimedia presentation, knowledge of creative media software applications is the key to productivity and success, the programme teaches how to create multimedia applications using digital technology.

**Indicative Content:** Core – Business of Digital Media; Interaction Design; Multimedia Programming; Game Design and Development; Research Methods; Digital Media and Society; Visual Communication; Web Authoring; Dissertation. Options – Desktop Publishing; eLearning; 3D Modelling & Animation; Server Side Web Development and Databases; Video Production; Digital Storytelling; Theories and Principles of Animation.

**Admission Requirements:** Candidates applying for this course should have a Honours degree 2:2 or above in any discipline or international equivalent and/or relevant work experience.

**Course Webpage:** [shortened as] <http://bit.ly/2wp7g1b>

**Application:** Apply via the course webpage.

**G19 MSc in Big Data Management and Analytics****GCD**

**Study Location:** Griffith College Dublin

**Course Duration:** 1 year

**Course Outline:** Designed specifically to address a growing need in the industry, the MSc in Big Data Management and Analytics at Griffith College is a 1 year programme which aims to build upon students' knowledge of computing science and create big data specialists.

**Indicative Content:** Big Data Analytics; Information Retrieval and Web Search; Concurrent and Parallel Programming; Cloud Computing; Big Data Management; Data Mining Algorithms and Techniques; Applied Data Science; Research Methods; Dissertation.

**Admission Requirements:** Candidates applying for this course should have a 2:2 honours degree in Computing Science.

**Course Webpage:** [shortened as] <http://bit.ly/2baGxbO>

**Application:** Apply via the course webpage.

**G20 MSc in Network and Information Security****GCD**

**Study Location:** Griffith College Dublin

**Course Duration:** 1 year

**Course Outline:** Designed specifically to address a growing need in the industry, the MSc in Network and Information Security at Griffith College is a 1-year programme which aims to enable students to develop robust and efficient network security plans, strategies and solutions.

**Indicative Content:** Information and Network Security Technologies; Legal and Ethical Aspects of Information Security; IT Infrastructure Protection & Ethical Hacking; Cryptography; Computer Forensics; Managing Information Security; Telecommunication Networks and Services; Research Methods; Dissertation.

**Admission Requirements:** Candidates applying for this course should have a 2:2 honours degree in Computing Science.

**Course Webpage:** [shortened as] <http://bit.ly/2wp5KMw>

**Application:** Apply via the course webpage.

**G21 MSc in Data Science****ITC**

**Study Location:** Institute of Technology, Carlow

**Course Duration:** 1 year

**Course Outline:** The programme is designed to meet current industry needs and provides students with a thorough theoretical and practical grounding in the analysis and utilisation of large data sets, together with

experience in conducting data science development projects, thereby preparing graduates for positions of responsibility in the Big Data and IT industries.

**Indicative Content:** Programming for Data Scientists; Data and Data Storage Technology; Statistics for Data Science; Research Methods; Infrastructure for Big Data; Data Analytics and Algorithms; Data Visualisation and Insight; Project/Dissertation.

**Admission Requirements:** An undergraduate degree with a minimum 2:2 or equivalent in computer science or mathematical sciences, or another area with a strong numerate content (e.g. engineering, finance, physics, biosciences or economics).

**Course Webpage:** [shortened as] <https://bit.ly/2vSH0dz>

**Application:** Apply directly to the International Office by emailing [noneuapply@itcarlow.ie](mailto:noneuapply@itcarlow.ie) with an *IT Carlow Non-EU Application Form*, which is available for download at <https://bit.ly/2vSovWB>.

## **G22 MSc in IT-Enabled Innovation\***

**MU**

**Study Location:** Maynooth University

**Course Duration:** 1 year

**Course Outline:** The MSc in IT-Enabled Innovation is aimed at both Business and non-Business graduates. This course develops the capacity for participants to understand how IT operates both as a function and as a key interrelated resource within an organisational context. This involves understanding people, work processes, relationships, organisation structures, and organisation strategies, and how all of these impact on and are impacted by Information Technology.

**Indicative Content:** IT Governance, Performance and Risk; Digital Business; Strategic Management; Career Planning and Development; Contemporary Issues in IT; IT Skills and Capabilities: Digital Enablement; Financial Management; Actionable Insights Through Research; Placement Project.

**Admission Requirements:** This programme assumes no prior knowledge of IT, Business or Management topics. Candidates should have a minimum 2.2 grade, honours degree.

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

**Course Webpage:** [shortened as] <https://bit.ly/2BBqNin>

**Application:**

**PAC Code: MH84D**

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

## **G23 MSc in Computer Science (Software Engineering)**

**MU**

**Study Location:** Maynooth University

**Course Duration:** 1 year

**Course Outline:** The Master of Science in Software Engineering degree at Maynooth University exposes graduates in Computer Science and related disciplines to the many facets of this complex area – the technical, the

methodological, the organisational – so that successful participants will subsequently be able to lead major projects in software engineering in many industrial and commercial sectors.

**Indicative Content:** Core – Advanced Concepts in Object-Oriented Programming; Rigorous Software Process; The Mathematics & Theory of Computer Science; Project. Options – Requirements Engineering & System Design; Software Testing; Practical Cryptography; Databases; Interaction Design; Internet Solutions Engineering.

**Admission Requirements:** An honours degree in Computer Science or a closely related discipline, containing significant Computer Science content. An average grade of at least 60% (equivalent to a 2:1) or above.

**Course Webpage:** [shortened as] <https://bit.ly/2BDyOmH>

**Application:**

**PAC Code: MHG50**

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

**G24 MSc in Cyber Security**

**NCI**

**Study Location:** National College of Ireland

**Course Duration:** 1 year

**Course Outline:** The aim of this programme is to provide learners with essential expert technical knowledge, competence and research skills of the most important technical concepts of cybersecurity and how they are applied in emerging areas such as device security and forensics. The course is technical and practical in nature, uniquely embedded in industry, and develops in-depth expertise of core technical topics within the area of cybersecurity.

**Indicative Content:** Core – Secure Programming for Web; Security Fundamentals; IT Law and Ethics; Network Security and Penetration Testing; Research in Computing; Secure Programming for Application Development; Cryptography; Research Methods; Internship. Options – Forensics and eDiscovery; Cloud Security; Malware Analysis; Domain Context; Incident Response and Analysis.

**Admission Requirements:** Minimum of a 2:2 honours degree in computing or a cognate area. Candidates are expected to have programming ability. Cognate area means a STEM (Science, Technology, Engineering, and Mathematics) degree that also taught programming/application development related modules.

**Course Webpage:** [shortened as] <https://bit.ly/2OyYFvX>

**Application:** Download an application form from [www.ncirl.ie/International/How-to-Apply](http://www.ncirl.ie/International/How-to-Apply) and email to [admissions@ncirl.ie](mailto:admissions@ncirl.ie).

**G25 MSc in Cloud Computing**

**NCI**

**Study Location:** National College of Ireland

**Course Duration:** 1 year

**Course Outline:** This course will provide you with the latest knowledge and competencies required by the fastest growing global industry: the cloud. Cloud computing has become a multi-billion euro industry and this course

offers specialisations in two key areas: Infrastructure (IaaS - Infrastructure as a Service) and Development (SaaS - Software as a Service).

**Indicative Content:** Core – Cloud Architecture; Cloud Security; Utility Computing; Data Storage and Management; Research in Computing; Business Strategies for Cloud Computing; Research Methods. Options – Cloud Infrastructure Management; Cloud Application Development; Virtualisation; Programming for Data Analytics; Cloud Application Services; Industry Based Research Project; Research Project.

**Admission Requirements:** Minimum of a 2:2 honours degree in a cognate area.

**Course Webpage:** [shortened as] <https://bit.ly/2vMCai2>

**Application:** Download an application form from [www.ncirl.ie/International/How-to-Apply](http://www.ncirl.ie/International/How-to-Apply) and email to [admissions@ncirl.ie](mailto:admissions@ncirl.ie).

<b>G26 MSc in Data Analytics</b>	<b>NCI</b>
----------------------------------	------------

**Study Location:** National College of Ireland

**Course Duration:** 1 year

**Course Outline:** The course structure accommodates a wide audience of learners whose specific interests in data analytics may be either technically focused or business focused. All students will also gain exposure to pertinent legal issues and product commercialisation considerations associated with the data analytics field. The course will be delivered using academic research, industry-defined practical problems, and case studies.

**Indicative Content:** Core – Statistics for Data Analytics; Data Warehousing and Business Intelligence; Strategic ICT & eBusiness Implementation; Advanced Data Mining; Data Visualisation; Research in Computing; Research Project. Options – Managing the Organisation; Data Storage and Management; Programming for Data Analytics; Analytical CRM.

**Admission Requirements:** Minimum of a 2:2 honours degree in a cognate area.

**Course Webpage:** [shortened as] <https://bit.ly/2MkNOLv>

**Application:** Download an application form from [www.ncirl.ie/International/How-to-Apply](http://www.ncirl.ie/International/How-to-Apply) and email to [admissions@ncirl.ie](mailto:admissions@ncirl.ie).

<b>G27 MSc in Information Systems Management*</b>	<b>NUIG</b>
---	-------------

**Study Location:** NUI Galway

**Course Duration:** 1 year

**Course Outline:** A variety of sought-after technical skills are covered in this course, using leading-edge industry software. Students gain practical knowledge of business system analysis and design; project management; database design; applications development and the business context of IS development and management. The teaching approach places a strong emphasis on hands-on-skills and problem-based learning.

**Indicative Content:** Core – Web Design and Development; Interactive Systems Design; Business Data Communications; Systems Development and Project Management; Database Systems; Business Applications

Programming; Information Systems Management; Information Systems Strategy and Innovation; Applied Systems Analysis; Project. Options – Information Systems Innovation; Information Systems Security and Ethics; Decision Systems and Business Analytics; Advanced Applications Programming.

**Admission Requirements:** Normally a Second Class Honours Bachelor's Degree (or equivalent). Successful applicants will come from a variety of academic and professional backgrounds with prior exposure to information technology and/or business.

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

**Course Webpage:** [shortened as] <http://bit.ly/2bLE6it>

**Application:**

**PAC Code: GYC24**

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

**G28 MSc in Computer Science (Future Networked Systems) TCD**

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** This programme deals with how things become smart and connected as software systems are more and more embedded in our everyday environments, from mobile social networking to managing city resources such as road traffic. Dealing with such large-scale, cyber-physical and distributed systems requires novel approaches that address timeliness, safety, privacy and scale challenges.

**Indicative Content:** Machine Learning; Research Methods; Innovation; Scalable Computing; Urban Computing; Security & Privacy; Advanced Software Engineering; Distributed Systems; Dissertation.

**Admission Requirements:** A 2:1 grade or higher from a reputable university in Computing or strongly related discipline. You need to be able to be fully competent in programming in C, C++ or Java.

**Course Webpage:** [shortened as] <http://bit.ly/2x5PqNS>

**Application:** Apply online via course webpage

**G29 MSc in Computer Science (Intelligent Systems) TCD**

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** This programme focuses on smart, interactive web applications and systems, which are becoming an integral part of our daily lives – at home, in the workplace, and in social interaction. Designing and building these systems requires expertise in artificial intelligence, human language understanding and generation, web systems and applications, data analytics and knowledge engineering.

**Indicative Content:** Machine Learning; Research Methods; Innovation; Artificial Intelligence; Knowledge & Data Engineering; Text Analytics; Information Retrieval & Web Search; Adaptive Applications; Advanced Software Engineering; Dissertation.

**Admission Requirements:** A 2:1 grade or higher from a reputable university in Computing or strongly related discipline. You need to be able to be fully competent in programming in C, C++ or Java.

**Course Webpage:** [shortened as] <http://bit.ly/2x5AK1b>

**Application:** Apply online via course webpage

**G30 MSc in Computer Science (Augmented & Virtual Reality)**

**TCD**

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** This programme equips students with the theoretical and practical knowledge to enable them to participate in the design and development of the technology that underpins fast moving video game market as well as providing transferable skills relevant for careers in the wider industries of interactive entertainment, new media and communication.

**Indicative Content:** Core – Machine Learning; Research Methods; Innovation; Computer Vision; Mathematics of Light & Sound; Real-Time Rendering; Augmented Reality; Real-Time Animation; Advanced Software Engineering; Dissertation. Options – Computer Graphics; Digital Media Systems.

**Admission Requirements:** A 2:1 grade or higher from a reputable university in Computing or strongly related discipline. You need to be able to be fully competent in programming in C, C++ or Java.

**Course Webpage:** [shortened as] <https://bit.ly/2MuPxKc>

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

**G31 MSc in Electronic Information Engineering**

**TCD**

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** This is a taught master's course which aims to equip graduates with a deep knowledge and understanding of the design tools for modern computational products and systems. Graduates specialise in fundamental theory and applications relating to the generation, distribution, analysis and use of information in engineering and science. Students may select from a number of 5th year MAI and MSc level courses to attain the credits sufficient for the award.

**Indicative Content:** Core – Research Project/Dissertation; Research Methods; Statistical Signal Processing; Introduction to Deep Learning. Options – Speech and Audio Engineering; Spatial Audio; Audio Production Engineering; Digital Media Systems; Wireless Networks and Communications; Complex Systems Science; Reconfigurable Hardware for Computational Engineering.

**Admission Requirements:** Admission is normally restricted to graduates who have achieved an upper second class honours degree (2:1), or better, in engineering, science, computing, statistics, mathematics or a related discipline. Well-qualified candidates or industry professionals from other numerate disciplines who have sufficient knowledge of computational aspects of engineering and science, may also be considered.

**Course Webpage:** [shortened as] <https://bit.ly/2M1b3K7>

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

<b>G32</b>	<b>MSc in Information Systems for Business Performance*</b>	<b>UCC</b>
------------	---	------------

**Study Location:** University College Cork

**Course Duration:** 1 year

**Course Outline:** This course aims at providing students with a coherent set of skills essential in building, managing, and leveraging an effective and efficient Information Systems (IS) capability for the modern organisation. This means providing students with a clear understanding of how to manage information systems and leverage the potential of the latest Information Technologies (IT) to create value for the firm; reducing costs, solving organisational problems or providing better products and services to customers.

**Indicative Content:** Business Analysis Requirements, Skills and Techniques; IT Sourcing and Project; Data Analysis and Design; Storage Technology; Electronic Business Models & Systems; IS for Organisational Performance; Leveraging IT Seminar Series; Application Design; IT Governance and Compliance; Databases for Management Information Systems; Optimising the Business Value of IT; Business Models for Disruptive Technology; Enterprise Business Intelligence; Professional Practice Skills; Collaborative Industry Research Project.

**Admission Requirements:** A Second Class Honours degree or higher, except graduates from degrees with high levels of software development content (e.g. business information systems, computer science, etc).

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

**Course Webpage:** [www.ucc.ie/en/ckl18](http://www.ucc.ie/en/ckl18)

**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: CKL18**

<b>G33</b>	<b>MSc in Computer Science (Interactive Media)*</b>	<b>UCC</b>
------------	---	------------

**Study Location:** University College Cork

**Course Duration:** 1 year

**Course Outline:** The broad aim of the course is to equip students from a wide range of backgrounds with a thorough understanding of the technology and industry-standard tools used in the digital media sector. On successful completion of the course, you will have a comprehensive knowledge of the underlying concepts, technologies and practices of interactive digital media and be able to apply these to create interactive digital media products.

**Indicative Content:** Core: Authoring; Web Development for Digital Media; Audio and Sound Engineering; Digital Video Capture and Packaging; 3D Graphics and Modelling; Dissertation. Options: Future and Emerging Interaction Technologies; Internet-based Applications; Digital Video Compression and Delivery; Human Computer Interaction; Mobile Multimedia; Audio Processing.

**Admission Requirements:** Graduates of any discipline who have achieved at least a 2:2 Honours degree, or equivalent professional qualification, provided there is no significant overlap between their previous courses of study and the content of this course.

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

**Course Webpage:** [www.ucc.ie/en/ckr05](http://www.ucc.ie/en/ckr05)

**Application:**

**PAC Code: CKR05**

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

**G34 MSc in Data Science and Analytics\***

**UCC**

**Study Location:** University College Cork

**Course Duration:** 1 year

**Course Outline:** The combination of sophisticated computing and statistics modules will develop skills in database management, programming, summarisation, modelling and interpretation of data. The programme provides graduates with an opportunity, through development of a research project, to investigate the more applied elements of the disciplines.

**Indicative Content:** Core – Data Mining; Foundations of Statistical Data Analytics; Generalised Linear Modelling Techniques; Dissertation in Data Analytics. Options – Introduction to Relational Databases; Database Design and Administration; Database Technology; Information Storage and Retrieval; Optimisation; Analysis of Networks and Complex Systems; Internet Computing for Data Science; Stochastic Modelling Techniques; Multivariate Methods for Data Analysis; Operations Research; Stochastic Decision Science; Large-Scale Application Development and Integration; Programming in Python.

**Admission Requirements:** Second class honours (2:1 grade) or higher degree in computer science or mathematical sciences, or in a degree with a strong numerate content (e.g. engineering, finance, physics, biosciences or economics). Applicants who do not meet this standard will also be considered if they have an undergraduate degree and a minimum of 5 years verifiable relevant industrial experience.

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

**Course Webpage:** <https://www.ucc.ie/en/ckr49/>

**Application:**

**PAC Code: CKR49**

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

**G35 MSc in Computing Science\***

**UCC**

**Study Location:** University College Cork

**Course Duration:** 1 year

**Course Outline:** This MSc programme will provide you with the skills required to understand the entrepreneurship and innovation required for the software industry. Many national and multinational companies employ computer

science graduates in areas such as software development and engineering, artificial intelligence, systems and networks, database and systems security as well as mobile multimedia, modelling, research and development. You will also get the chance to demonstrate the skills you have learned by completing a substantial research and development project.

**Indicative Content:** Core – Case Studies in Computing Entrepreneurship; Large-Scale Application Development and Integration; Database Technology; Information Storage and Retrieval; Project Development Skills; Dissertation in Computing Science. Options - Mobile Devices and Systems; Mobile Applications Design; Formal Methods for Distributed Systems; Model-Based Software Development; Optimisation; Services and Mobile Middleware; Multimedia Technology in Mobile Networks; Analysis of Networks and Complex Systems; Network Security; Data Mining.

**Admission Requirements:** Second class honours (2.2 grade) or higher degree in Computer Science or a closely related discipline. Applications from other suitably qualified candidate, or from those with equivalent experience/qualifications, will be considered.

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

**Course Webpage:** <http://www.ucc.ie/en/ckr40/>

**Application:**

**PAC Code: CKR40**

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

# O

## Other Courses

**Study Location:** Cork Institute of Technology

**Course Duration:** 1 year

**Course Outline:** This innovative MA programme offers the opportunity to gain a comprehensive understanding of public relations as a form of communication and pays particular attention to the growing importance of digital and interactive media on the practice of public relations and professional communications.

**Indicative Content:** Core – PR Theory & Application; Research Methods and Practice; Ethics & Social Responsibility; Multimedia Production; Media Writing; Cybercultures; New Media Production; PR and New Media; Public Relations Campaigns; Business Communications & Online Writing; Project. Options – Brand Management; Digital Marketing Environment; Event & Project Management; Media Law, Ethics & Professional Practice; Enterprise and Innovation.

**Admission Requirements:** A minimum 2:2 honours degree. Admission to the course will be on the basis of interview.

**Course Webpage:** <http://www.cit.ie/course/CRBPRNM9>

**Application:** Apply directly to the International Office by emailing [international@cit.ie](mailto:international@cit.ie) with an application form, which is available for download at [international.cit.ie/how-to-apply](http://international.cit.ie/how-to-apply).

**Study Location:** Cork Institute of Technology

**Course Duration:** 1 year

**Course Outline:** The programme blends journalistic tools and techniques with content creation using new technologies and digital media to prepare students for the new media workplace. The programme has a strong connection with the media industry. Graduates of this programme are well equipped with the requirements to operate as today's digital journalists and content creators.

**Indicative Content:** Core – Audio Broadcasting; Media History & Structure; News Writing and Editing; Research Methods and Practice; Multimedia Production; New Media Workplace; New Media Production; Media Law, Ethics & Professional Practice; Features and Web Writing; Visual Broadcasting; Cybercultures; Project. Options – Creative Thinking and Design; Studio Technology.

**Admission Requirements:** A minimum 2:2 honours degree. Admission to the Master of Arts in Journalism and Digital Content Creation programme is based on a combination of an online application form and a short interview. It is expected that students entering the course have mastered basic writing skills, including grammar, syntax and the ability to conceptualise and articulate ideas in writing.

**Course Webpage:** <http://www.cit.ie/course/CRHJWNM9>

**Application:** Apply directly to the International Office by emailing [international@cit.ie](mailto:international@cit.ie) with an application form, which is available for download at [international.cit.ie/how-to-apply](http://international.cit.ie/how-to-apply).

**Study Location:** Dublin Institute of Technology

**Course Duration:** 1 year

**Course Outline:** The programme is aimed at both professionals currently employed within the tourism industry and those from complementary backgrounds who wish to enter the tourism field. In this context it may be of particular interest to people coming from a heritage, languages, geography, marketing or business background. This programme aims to equip participants with the necessary expertise to manage, co-ordinate and develop tourism businesses and projects in Ireland and abroad. It is aimed at both professionals currently employed within the tourism industry and those from related fields. This dynamic programme encourages interaction between academics and industry practitioners from the national and international tourism sector.

**Indicative Content:** International Tourism Trends, Markets & Products; Tourism Destination Planning & Management; Managerial Finance & Entrepreneurialism; The Effective Manager; Emerging Industry Issues; Strategic Marketing & Digital Commerce; Dissertation (including Research Methods).

**Admission Requirements:** Second class honours degree (2:2 grade) or higher in any discipline.

**Course Webpage:** [shortened as] <http://bit.ly/2dgF8zW>

**Application:** Apply via the 'Non-EU Sept Intake' button on the course webpage.

**Study Location:** Dublin Institute of Technology

**Course Duration:** 1 year

**Course Outline:** This globally recognised hospitality programme is one of DIT's most sought after programmes. It is the first and only programme of its kind in the Republic of Ireland and provides participants with a top-level educational package that is delivered by leading academics and experts from the national and international hospitality sector. The programme covers all aspects of the hospitality industry with a business based curriculum that is designed to equip participants with the management skills and analytic capabilities necessary to obtain careers in a wide range of organisational settings.

**Indicative Content:** International Hospitality Operations Management; Strategic Revenue Management Solutions; Managerial Finance & Entrepreneurialism; The Effective Manager; Emerging Industry Issues; Strategic Marketing & Digital Commerce; Dissertation (including Research Methods).

**Admission Requirements:** Second class honours degree (2:2 grade) or higher in any discipline.

**Course Webpage:** [shortened as] <http://bit.ly/2dMzHc7>

**Application:** Apply via the 'Non-EU Sept Intake' button on the course webpage.

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

**Course Duration:** 1 year

**Course Outline:** The course will support imaginative, experimental and interdisciplinary enquiry through a range of media and approaches. Students will choose one of four strands in which to base their study: Contemporary art studio practice; Digital cultures; Film and lens based media; socially engaged practice. Students will be encouraged to work collaboratively as well as be independent, self-directed critical thinkers.

**Indicative Content:** Core – Themes and Issues in Creative Practice; Professional Development; Research and Innovation. Options – Research Project or Creative Practice Project and Minor Thesis.

**Admission Requirements:** All qualified applicants with a relevant Level 8 qualification or equivalent will be short-listed for interview. Other applicants may be considered through the Recognition of Prior Learning (RPL) process.

**Course Webpage:** [shortened as] <http://bit.ly/2x1dDXy>

**Application:** Contact [international@gmit.ie](mailto:international@gmit.ie) for an application form.

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** The M.Sc. course concentrates on teaching the theory associated with developing and implementing digital media applications rather than teaching how to use off-the-shelf applications. Students are exposed to programming languages and platforms as well as methodologies for the creation, capture and presentation of text, graphics, audio and moving images. Students work collaboratively on course assignments and final projects which are exhibited publicly at the end of each year.

**Indicative Content:** Programming for Digital Media; Authoring for Digital Media; Contextual Media; Audio, Video and Sensor Technologies; Visual Computing and Design; Research Paper; Final Project.

**Admission Requirements:** Applications will be accepted from good honours' graduates in any discipline. Literary, artistic and creative ability is taken into consideration along with mathematical and problem-solving ability. Knowledge of programming is not a pre-requisite for entry.

**Course Webpage:** [shortened as] <http://bit.ly/2fY2y3p>

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

**Study Location:** Trinity College Dublin

**Course Duration:** 1 year

**Course Outline:** Digital Humanities is a field of study, research, and invention at the intersection of humanities, computing, and information management. It is methodological by nature and multidisciplinary in scope involving the investigation, analysis, synthesis, and presentation of information in electronic form.

**Indicative Content:** Core – Theory and Practice of Digital Humanities; Web Technologies; Digital Humanities Internships and Project Management; Dissertation. Options – Digital Scholarly Editing; From Metadata to Linked Data; Cyberculture/Popular Culture; Digital History: Tools and Techniques; Programming for Digital Media; Strong Corpus Linguistics; Visualising the Past; Heritage Visualisation in Action.

**Admission Requirements:** Applicants should have a good honours degree (at least an upper second, GPA of at least 3.3) in any of the disciplines of the humanities.

**Course Webpage:** [shortened as] <http://bit.ly/2v7kVWr>

**Application:** Apply online via course webpage

**Study Location:** University of Limerick

**Course Duration:** 1 year

**Course Outline:** This programme offers unique opportunities for designers, computer scientists and artists to exploit their potential in new areas (experience, interaction and participatory design, internet of things, social media and virtual reality, mobile and physical computing), across a wide range of activities, such as digital multimedia, software development, interactive installation, human-centred research and education.

**Indicative Content:** Core – Foundations of Interactive Media Design; Interactive Media Project/Workshop 1 and 2; Interactive Media Project. Options – Digital Media Software and Systems; Information Society; Realtime Audio & Video; Physical Computing; Mobile Application Design; Product Design & Modelling; Visual Coding; Applied Interaction Design; CS-Studio I.

**Admission Requirements:** A primary degree in any subject area, with first or second class honours. A portfolio of the applicant's own work that demonstrates the applicant's creative ability. This can be artwork, websites, software, writing, etc. Applicants may be called for an interview. The interview normally takes 20-30 minutes and includes a review of the applicant's portfolio.

**Course Webpage:** [shortened as] <http://bit.ly/2vZ5Nf1>

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

**Study Location:** University of Limerick

**Course Duration:** 1 year

**Course Outline:** This programme is geared to provide students with an understanding of the international tourism industry and an appreciation of the key issues affecting its continued development. It also presents an opportunity to gain insights into the marketing and management issues impacting on the sector. Students are also presented with opportunities to update their language and IT skills, their communication and presentation skills, and to interact with tourism industry practitioners and visiting international faculty. Research skills are developed through dedicated methodology modules leading to the completion of a dissertation on a chosen topic in tourism. An innovative and integral part of this course is an international field trip which all students undertake.

**Indicative Content:** Tourism Principle and Practice; Economics of Tourism; Tourism Services Marketing; Tourism Enterprises; Research Methods; Economic Appraisal and Evaluation Techniques; Strategic Marketing for Tourism; International Tourism Trends; Tourism Planning and Development; Thesis.

**Admission Requirements:** Good honours (minimum 2.2) primary degree from a variety of disciplines including Economics, Geography, Sociology, Business Studies, Hotel Management, Languages, History, Anthropology, Marketing and others.

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

**Course Webpage:** [shortened as] <http://bit.ly/UJx6Gw>

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