

### **Environmental Engineering**



# **Environmental Engineering**

#### **Degree awarded**

MSc in Environmental Engineering PgDip in Environmental Engineering

#### **Duration & mode of study**

MSc:	1 year full-time
	2–3 years part-time
PgDip:	9 months full-time
	18 month nart-time

#### **Course description**

Environmental Engineering is that branch of sustainable engineering concerned with protecting the environment from man's activities and protecting man from adverse effects of the environment. Established in 1995, the MSc/PgDip in Environmental Engineering is designed for graduates in specialist areas of engineering, science and agriculture, who wish to broaden their knowledge and skills in the areas of hydrogeology, contaminated land, landfills, environmental pollution and regulatory controls. The course involves staff mainly from the Faculty of Engineering & Physical Sciences, in collaboration with the Agriculture & Food Science, and with external inputs from relevant professionals in the industry.

#### **Module Details**

The study programme comprises formal lectures, coursework, and for the MSc pathway a research dissertation. Thesis projects are completed during June-September typically under primary supervision by QUB research staff and/or in close collaboration with the external private industry sector and/or regulatory agencies. Strong communication skills are also developed during the programme. During the academic year students follow a taught programme of core and elective modules from a list which includes for example Environmental Engineering, Hydrogeology, Contaminated Land & Waste Management, Computer Modelling of Contaminant Transport, Water & Waste Water Treatment, Coastal Engineering, Geotechnical Engineering, Environmental Legislation, Highway & Traffic Engineering, Business Management and Advanced GIS.

First semester course work is examined in January the second semester work is examined in May.

#### **Entry requirements**

**For MSc entry:** typically Lower Second Class, 2(ii), or equivalent in a relevant degree. If insufficient mathematics then 2(i) or better.

For PgDip entry: Pass Honours level degree or equivalent.

International students must have appropriate English Language skills [IELTS 6.5; TOEFL 577 (paper), 233 (computer); or better]

#### **Career opportunities**

The course provides a suitable background for careers in environmental engineering, monitoring, management and consultancy, and it establishes a basis for interdisciplinary research to a higher level. Expertise in Environmental Engineering is in great demand. Past graduates from this course have found employment with employers such as Environment Regulatory Agencies, Civil Engineering & Specialist Contractors as well as Engineering & Environmental consultancies in the UK, Ireland and further abroad.

#### **Course fees**

Further Information on current fees is given at: http://www.qub.ac.uk/bo/ income/fees.htm

#### **Scholarships**

The School of Planning, Architecture and Civil Engineering offers a number of postgraduate taught bursaries and fee reduction scholarships for UK, EU and international students. All applicants are automatically considered for these. From time to time industry awards are available for taught MSc programmes. Further information can be obtained from the School of Planning, Architecture and Civil Engineering website (www.qub.ac.uk/space).

The University also offers and administers a number of awards and bursaries in the form of Fellowships, Externally-Funded Scholarships, Special Bequests, Gifts and Prizes to which application can be made by students. Government scholarship schemes may be available for taught MSc programmes. Further information can be obtained from the Academic and Student Affairs Office (www.qub.ac.uk/directorates/ AcademicStudentAffairs/) or the Post Graduate Office (www.qub.ac.uk/home/ ProspectiveStudents/PostgraduateStudents/)

At time of print, a private industry bursary scheme for a student enrolled in the MSc/ PgDip programme (£1,000) is available from White Young Green Ltd.

#### **Further Information**

Requests for further information can be addressed to: Dr. Ulrich S. Ofterdinger Queen's University Belfast School of Planning, Architecture & Civil Engineering David Keir Building, Stranmillis Road Belfast BT9 5AG, Northern Ireland Tel: +44 (0)28 9097 4517 E-mail: U.Ofterdinger@qub.ac.uk

**Applications can be made online at:** https://pg.apply.qub.ac.uk/home/

#### Further information available at:

http://www.qub.ac.uk/space

http://www.qub.ac.uk/home/ ProspectiveStudents/



### **Environmental Planning**



## **Environmental Planning**

#### **Degree awarded**

MSc in Environmental Planning

#### Duration & mode of study

MSc: 1 year full-time

#### **Course description**

This is an exciting, high intensity MSc programme that brings you through a range of educational and learning experiences toward a professional career in environmental planning. Our course is accredited by the Royal Town Planning Institute (RTPI), the Royal Institute of Chartered Surveyors (RICS) and is compliant with European Council of Town Planning regulations. The course will last for one year and involves taught lectures, interdisciplinary project work, group seminars, and visits to and from planning practitioners. We have a dedicated library resource APIS and state of the art online teaching support via QUEENS ONLINE.

The course will deliver the professional knowledge and competency to enable graduates to become licentiate members of a fast growing profession with a vision concerned with the design and making of places that are both sustainable and embody a high quality of life. In an increasingly multicultural and economically competitive world the delivery of such aspirations is not straightforward. Tasks such as facilitating social inclusion and laying a sound spatial planning basis for development through the mediation of the various interests involved in the creation of place requires the skill and involvement of the planner. The course at Queen's will be delivered in a strong planning research environment sensitive to the local context of the divided city of Belfast, Northern Ireland and Ireland as a whole but availing of strong research and practice links to the rest of the United Kingdom, Europe and North America.

#### **Module details**

The course, is designed to take graduates from a broad range of disciplines and through an intensive programme of project work, lectures, seminars, study visits and supervised research, prepare them through a conversion process building on previous educational strengths, for a career in environmental planning. The programme of tuition is overseen by professional Partnership Boards of practitioners, academics and members of the Institutes which ensures that the knowledge, skills and value awareness imparted during education and training are up-to-date and cutting edge. Whilst the course places special emphasis on planning in an Irish context, attention is also directed to transferable spatial competencies within a broad European context.

#### **Course Structure**

Study is spread over three semesters involving 10 modules of varying credit weight (ie. CATS points) amounting to 180 credits in all. Modules will include: Introduction to Planning, Theory and Practice, Environmental and Planning Governance, Planning Skills and Ethics, GIS and Spatial Analysis, Property Development, Regeneration and Housing, Design in the Built Environment, International Spatial Planning, Professional Practice Project, Thesis/Work-based study on a specialist subject.

### Entry Requirements and Selection Procedures

Entry to the MSc will normally require an undergraduate degree from an approved institution at a grade of 2.1 or above. Typically entrants to the programme come from backgrounds in Geography, Sociology, Estate Management, Environmental Science, Architecture and Economics although recent entrants have included those with backgrounds in Arts and Humanities. Completed application forms should be received by the Admissions Office before 1st April each year. Normally provisional offers of places are made in May.

#### **Course Fees**

Further Information on current fees is given at:

http://www.qub.ac.uk/bo/income/fees.htm

#### Scholarships

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The University also offers and administers a number of awards and bursaries in the form of Fellowships, Externally-Funded Scholarships, Special Bequests, Gifts and Prizes to which application can be made by students. From time to time government scholarship schemes are available for taught MSc programmes. Further information can be obtained from the Academic and Student Affairs Office (www.qub.ac.uk/ directorates/AcademicStudentAffairs/) or the Post Graduate Office (www.qub.ac.uk/home/ ProspectiveStudents/PostgraduateStudents/)

#### **Further Information**

## Requests for further information can be addressed to:

Dr Michael Murray Queen's University Belfast School of Planning, Architecture & Civil Engineering David Keir Building, Stranmillis Road Belfast BT9 5AG, Northern Ireland Tel: +44 (0)28 9097 4742 E-mail: m.r.murray@qub.ac.uk **Applications can be made online at:** https://pg.apply.qub.ac.uk/home/ **Further information available at:** http://www.qub.ac.uk/space http://www.qub.ac.uk/home/ ProspectiveStudents/



### **Durability of Structures**



## **Durability of Structures**

#### **Degree Awarded**

MSc in Durability of Structures PgDip in Durability of Structures Certificate in Durability of Structures

#### **Duration & mode of study**

MSc:	1 year full-time
	2–3 years part-time
PgDip:	9 months full-time
	18 month part-time
Certificate:	Variable

#### **Course description**

The emphasis of this new programme of study is on "Durability of Structures". The programme provides details of advanced technologies used to improve the durability of materials and structures and the latest international research and practice on repairing, rehabilitating and maintaining structures.

It is aimed at broadening the knowledge of mechanisms of deterioration of construction materials and structures and introducing candidates to innovative approaches being developed for improving the service life of structures through both non-destructive testing and monitoring as an on-going activity. The programme has been developed aiming at both practising engineers and researchers for widening their knowledge base and making them specialists in dealing with durability of structures which will be invaluable to the construction industry. Due to the multidisciplinary nature of the programme, you will benefit from lectures given by faculty of civil engineering, geography, and visiting faculty from various related industries. The programme also serves as an excellent introduction and training for further research leading to PhD degree.

#### **Module details**

The syllabus aims to provide skills, knowledge and understanding on the durability of both structural materials and structures, and to develop critical and analytical problem solving skills across a broad range of subjects related to construction. The programme consists of taught modules in two semesters (three compulsory modules and various optional modules) and a research project in the

following four months. The first semester contains modules on Advanced Concrete Technology, Research Methods in the Built Environment, Durability of Concrete Structures and Project Management. In the second semester, you choose optional modules from Durability of Structural Steelwork, Structural Repairs and Maintenance, Whole Life Management of Structures, Business Management, and Managing Stone in the Built Environment. Each of these modules can be taken individually or as part of an MSc degree programme or postgraduate diploma programme. Part-time students may choose their programme in consultation with the programme co-ordinator. The final four months of the programme will be dedicated to an individual research project by the MSc students, in which either an industrial issue or a research topic will be studied independently by each student. Most modules are assessed by two essays and the rest by exams in January for first semester and May for second semester.

#### **Entry Requirements**

The standard academic entry requirements for a Masters programme is a 2(ii) UK Honours-equivalent first degree in a relevant engineering/scientific discipline with sufficient chemistry and mathematical background in their training. Where sufficient chemistry and mathematical background is not demonstrated, the MSc pathway is offered for a 2(i). For international candidates, at least a British Council IELTS qualification scored at a standard of 6.5 is essential. TOEFL scores (less preferred) are accepted with thresholds of 577 (paper) and 233 (computer).

#### **Career opportunities**

On graduating you will be able to enter directly to all areas of Building Industry, Advanced Sustainable Materials Technology, Consultancy Engineering, Commerce or Academia. You will also be well prepared to begin PhD research programmes, which may lead to careers in research establishments and universities.

#### **Course fees**

Further Information on current fees is given at:

http://www.qub.ac.uk/bo/income/fees.htm

#### Scholarships

The School of Planning, Architecture and Civil Engineering offers a number of post-graduate taught bursaries and fee reduction scholarships for UK, EU and international students. All applicants are automatically considered for these. From time to time industry awards are available for taught MSc programmes. Further information can be obtained from the School of Planning, Architecture and Civil Engineering (www.gub.ac.uk/space) The University also offers and administers a number of awards and bursaries in the form of Fellowships, Externally-Funded Scholarships, Special Bequests, Gifts and Prizes to which application can be made by students. From time to time government scholarship schemes are available for taught MSc programmes. Further information can be obtained from the Academic and Student Affairs Office (www.gub.ac.uk/ directorates/AcademicStudentAffairs/) or the Post Graduate Office (www.gub.ac.uk/home/ ProspectiveStudents/PostgraduateStudents/)

#### **Further Information**

## Requests for further information can be addressed to:

Dr. M. Sonebi Queen's University Belfast School of Planning, Architecture & Civil Engineering David Keir Building, Stranmillis Road Belfast BT9 5AG, Northern Ireland Tel: +44 (0)28 9097 4298 E-mail: cber@gub.ac.uk

**Applications can be made online at:** https://pg.apply.gub.ac.uk/home/

**Further information available at:** http://space.gub.ac.uk/cber

http://www.qub.ac.uk/space

http://www.qub.ac.uk/home/ ProspectiveStudent



### Water Resources Management



## Water Resources Management

#### **Degree awarded**

MSc in Water Resources Management PgDip in Water Resources Management

#### Duration & mode of study

MSc:	1 year full-time
	2–3 years part-time
PgDip:	9 months part-time
	18 month part-time

#### **Course description**

This programme provides training for the management of integrated water resources from local to global scale. The programme is aimed at graduates from relevant backgrounds in engineering, sciences, agriculture and planning who wish to gain knowledge of integrated water resources, management of inland and coastal waters and the role of the water resources manager in society with regards to sustainable development and sustainability issues. Students will benefit from instruction given by staff mainly from the Faculty of Engineering and Physical Sciences, and externally from relevant professionals in industry and regulatory agencies.

#### **Module details**

The study programme is in the form of lectures, coursework and an MSc degree research project report. The programme develops strong communication skills. Students follow a taught programme of 5 core modules in Water Resources Management, Hydrogeology, Engineering Hydrology, Chemistry of Natural Waters and Research Methods, in addition to 5 electives in Coastal Engineering, Water & Waste Water Treatment, Environmental Legislation, Computer Modelling of Contaminant Transport, and Geographical Information Systems. First Semester course work is examined in January, and Second Semester work is examined in May.

#### **Entry requirements**

The standard academic entry requirement for a Masters programme is generally a lower second class 2(ii) or equivalent in a relevant degree. A 2(i) or better is required for applicants with insufficient mathematics. PgDip entry requires a pass in an honourslevel degree or equivalent. International students must have appropriate English language skills [IELTS 6.5; TOEFL 577 (paper), 233 (computer), or better].

#### **Career opportunities**

This course provides a suitable background for careers in environmental engineering, water resources management, monitoring, consultancy and environmental regulatory agencies.

#### **Course Fees**

Further Information on current fees is given at: http://www.qub.ac.uk/bo/ income/fees.htm

#### **Scholarships**

The School of Planning, Architecture and Civil Engineering offers a number of post-graduate taught bursaries and fee reduction scholarships for UK, EU and international students. All applicants are automatically considered for these. From time to time industry awards are available for taught MSc programmes. Further information can be obtained from the School of Planning, Architecture and Civil Engineering (www.qub.ac.uk/space).

The university also offers and administers a number of awards and bursaries in the form of Fellowships, Externally-Funded Scholarships, Special Requests, Gifts and Prizes to which application can be made by students. From time to time government scholarship schemes are available for taught MSc programmes. Further information can be obtained from the Academic and Student Affairs Office (www.qub.ac.uk/ directorates/AcademicStudentAffairs/) or the Post Graduate Office (www.qub.ac.uk/home/ ProspectiveStudents/PostgraduateStudents/).

#### **Further information**

#### Requests for further information can be addressed to:

Dr. Debra Phillips Queen's University Belfast School of Planning, Architecture & Civil Engineering David Keir Building, Stranmillis Road Belfast BT9 5AG, Northern Ireland Tel: +44 (0)28 9097 5590 E-mail: d.phillips@gub.ac.uk

#### Applications can be made online at:

https://pg.apply.qub.ac.uk/home/

### Further information available at:

http://www.qub.ac.uk/space

http://www.qub.ac.uk/home/ ProspectiveStudents/



**Construction and Project Management** School of Planning, Architecture, and Civil Engineering



## **Construction and Project Management**

#### **Degree awarded**

MSc in Construction and Project Management PgDip in Construction and Project Management Certificate in Construction and Project Management

#### **Duration & mode of study**

MSc: 1 Year full-time 2–3 years part-time PgDip: 9 months part-time

18 months part-time Certificate: Variable Please contact the school directly for details for specific date of entry.

#### **Course description**

This programme provides a state-of-the-art education, new knowledge, and service in Construction and Project Management that are responsive to the needs of students and the construction and property industries. Emphasis is placed on a holistic approach in the management of construction firms and successful completion of simple to complex construction projects. The programme is aimed at those with some previous undergraduate knowledge of architecture, building, planning, management, quantity and land surveying, civil, structural, environmental or building service (mechanical and electrical) engineering. You benefit from teaching given by academic staff and industrial practitioners who bring extensive real-world experience to the classrooms. The programme also serves as an excellent introduction and training for further research leading to the degree of PhD.

#### **Module Details**

The syllabus aims to provide equal emphasis on both technical and management knowledge. The first semester contains modules such as research methods, project management, planning and control, construction management, procurements, contract administration and construction law (contracts, tort and evidence). In the second semester, you take modules which include design management, strategic management and international construction finance for managers, construction law 2 (dispute resolution: arbitration and adjudication), facility management and maintenance. The final four months of the programme are devoted to independent dissertation projects for the M.Sc Students. Projects with industrial involvement are encouraged. First semester courses are examined in January and the second semester courses are examined in May.

#### **Entry requirements**

The standard academic entry requirement for the programme is a Lower Second UK honours degree, or international equivalent, in a relevant science, engineering, management or social science discipline. International candidates are required to demonstrate a good standard of English, for example with at least a British Council IELTS qualification scored at a standard of 6.5. TOEFL scores (less preferred) are accepted with thresholds of: 577 (paper) and 233 (computer).

#### **Career opportunities**

The distinctive needs of the construction sector for management personnel at all levels offer excellent career opportunities for graduates of this programme with design and construction companies, project management consultants, real estate firms, government agencies amongst others. You will also be well prepared to begin PhD research programmes, which may lead to careers in research establishments and universities.

#### Course fees

Further Information on current fees is given at:

http://www.qub.ac.uk/bo/income/fees.htm

#### Scholarship

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#### **Further Information**

### Requests for further information can be addressed to:

Dr. Lukumon O. Oyedele Queen's University Belfast School of Planning, Architecture & Civil Engineering David Keir Building, Stranmillis Road Belfast BT9 5AG, Northern Ireland Tel: +44 (0)28 9097 4298 E-mail: cber@gub.ac.uk

**Applications can be made online at:** https://pg.apply.qub.ac.uk/home/

### **Further information available at:** http://www.qub.ac.uk/space

http://www.qub.ac.uk/home ProspectiveStudents/