



Civil Engineering and the University of Strathclyde

(GRPE). The GRPE was funded to promote multidisciplinary collaboration between leading research groups in the west of Scotland and to provide world-class joint research facilities (see www.grpeng.ac.uk). Member universities include Strathclyde, Glasgow, Glasgow Caledonian University and the University of the West of Scotland. In addition, the Department hosts the David Livingstone Centre for Sustainability (DLCS) which aims to promote cross-disciplinary programmes in teaching and research in the areas of environment and sustainability across the whole University (see www.strath.ac.uk/dlcs).

The University

The University is located in the heart of Glasgow, the UK's fourth largest city. Glasgow is one of the liveliest cities you'll ever experience. It is famous for its shopping, vibrant music scene and brilliant nightlife, as well as its cultural and architectural heritage. You will be spoiled for choice with all the restaurants, museums, shops and places of interest within easy walking distance.

Just beyond the city of Glasgow lies some of Scotland's most beautiful scenery. The local area is rich in history and heritage and the Trossachs, the Highlands and the Borders are easily accessible.

The Department

Civil Engineering at Strathclyde is one of the first departments in the UK to fully embrace the importance of the environment in today's world. It is a strong and forward-looking department and the ideal choice for anyone interested in undertaking a postgraduate degree that will benefit them in the job market. Our strong links to industry and public bodies are a unique feature of the Department and are integral to our approach to research and education. These links also provide our students with valuable contacts outside the world of academia. The Department is one of the main providers of graduates in Civil Engineering and Environmental Health in Scotland.

The Department leads the Joint Research Institute in Environment, Infrastructure and Transportation, formed in 2007 under the Glasgow Research Partnership in Engineering

Entry Requirements

MSc: A first degree or other qualification equivalent to a second-class Honours degree from a UK university in any discipline.

PgDip: A wider range of qualifications will be considered by the course leader.

In all cases, for candidates whose first language is not English, minimum standards of written and spoken English are an IELTS score of 6.5 (or a TOEFL score of 600, TOEFL internet-based test of 100, TOEFL computer-based test of 250).

Fees

For information on current fee levels, see: www.strath.ac.uk/registry/students/finance

How to Apply

Apply online via the postgraduate course page: www.strath.ac.uk/courses/postgraduate

Contact

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For more information about the Department and our courses see

www.strath.ac.uk/civeng/pg

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Department of Civil Engineering – David Livingstone Centre for Sustainability

MSc/PgDip/PgCert

SCIENCE, TECHNOLOGY & SUSTAINABILITY

This highly innovative course bridges the gap between environmental policy, development studies, and science and technology policy. With a strong international appeal, this course has been designed to respond to the urgent need to find better ways to harness science and technology in support of sustainability in both developed and developing countries.

The course examines the role of public policy in the application, development and management of science and technology to enhance social wellbeing, economic growth and environmental sustainability. It addresses questions such as how innovations occur in principle and in practice, and how they can best be managed.

The course is available full-time (one year) and part-time (two years) and is suitable to graduate students from all disciplinary backgrounds and/or employment situations.



The Programme and its International Context

The 2002 World Summit on Sustainable Development and other international bodies – such as UNESCO (United Nations Educational, Scientific & Cultural Organisation) and UNCTAD (United Nations Conference on Trade and Development) – have consistently identified the need to strengthen mechanisms, skills and policies to facilitate the deployment of science and technology in support of sustainability. This course is designed to respond to this international concern.

The course combines technical study with the exploration of related policy implications. Students will acquire an understanding of scientific or technical issues related to sustainable development and acquire skills in the use of tools and methods for environmental management. They will also develop the skills, knowledge and understanding to design, evaluate and manage science and technology policy in the wider context of national and international sustainable development programmes.

Programme Structure

The Diploma and MSc courses run concurrently, involving a curriculum of four core modules (totalling 48 credits) and a wide range of optional modules relating to technology, development policy and strategy, and environmental management (minimum of 72 credits). Each module is taught two to three hours per week over eight to 12 weeks. In addition, MSc students undertake a dissertation (60 credits). Progress to the MSc is dependent on performance in the instructional modules.

For part-time study the modules can be taken over two years (attending classes typically one day per week) with the dissertation completed in the second year. In addition to the dissertation topics proposed by course leaders and industrial partners, part-time students may propose topics of particular relevance to their employer.

Core Modules

- Science, Technology and Innovation Policy
- Principles of Sustainable Development
- International Environmental Policy
- Research Methods

Optional Modules

(Not all classes may be offered each year)

- Recent Trends in Technological Progress
- Globalisation and International Technology Markets
- Development Strategy and Policy
- Energy Resources and Policy
- Pollution Control Policy
- Recycling Urban Land
- Transport, Development and Sustainability
- Ecology, Biodiversity and Sustainability

- Environmental Economics
- Business Strategy and the Environment
- Environmental Management Systems
- Applied Strategic Environmental Assessment
- Environmental Impact Assessment
- Spatial Query and Analysis using GIS
- UK and EU Environmental Law
- Climate Change Mitigation & Adaptation

Duration of Course

MSc: 12 months full-time; 24 months part-time
PgDip: 9 months full-time; 18 months part-time
PgCert: 6 months full-time; 12 months part-time

Postgraduate Courses Offered by the Department

In addition to the MSc in Science, Technology & Sustainability the Department also offers the courses listed below. All the courses already involve extensive industrial collaboration and further partnerships with companies, government agencies and NGOs are being developed.

- MSc Environmental Engineering
- MSc Environmental Entrepreneurship – in collaboration with the Hunter Centre for Entrepreneurship, the first degree of its kind in Europe
- MSc Environmental Forensics – in collaboration with the Centre for Forensic Science, Dept of Pure & Applied Chemistry, the first degree of its kind in the UK
- MSc Environmental Health – accredited by REHIS
- MSc Environmental Science*
- MSc Environmental Studies
- MSc Geotechnics* – in partnership with industry
- MSc Global Water Sustainability*
- MSc Hydrogeology – new for 2010-11

- MRes Geo-Environmental Engineering
- MRes Integrated Pollution Prevention & Control (IPPC)
- MRes Sustainable Construction & Infrastructure

* A joint degree between the Universities of Strathclyde and Glasgow

Accreditation has been sought from the Institution of Civil Engineers (ICE) for our MSc courses as 'matching sections'.

Careers

The course is suitable for graduates in any discipline, in particular, students and practitioners of policy analysis, planning and decision-making in developed and developing countries. It should enable them to work in:

- government ministries, think-tanks, regulatory agencies, and other public bodies related to science, technology, industrial innovation and environmental sustainability
- international bodies, including agencies of the United Nations and international Non-Governmental Organisations that are engaged in development activities
- Research and Development management in either the public or private sector