



School of Engineering and the Built Environment

MSc, PgD, PgC Environmental Management
MSc Environmental Management (Oil and Gas)
MSc Environmental Management (Waste)
MSc Environmental Management (Water)
MSc Environmental Management (Energy)

Programme Specification Document

Academic Year 2019/20

Produced 24th June 2019

1 GENERAL INFORMATION

Programme Titles:	MSc Environmental Management MSc Environmental Management (Oil and Gas) MSc Environmental Management (Waste) MSc Environmental Management (Water) MSc Environmental Management (Energy)
Final Award:	MSc Environmental Management MSc Environmental Management (Oil and Gas) MSc Environmental Management (Waste) MSc Environmental Management (Water) MSc Environmental Management (Energy)
Exit Awards:	PgD Environmental Management PgC Environmental Management
Awarding Body:	Glasgow Caledonian University
Approval Date (Predecessor Programmes):	2000 (EM and EEM (Waste)) 2010 (EM (Energy)) 2013 (EM (Oil and Gas)) 2014 (EM (Water))
School:	Engineering and Built Environment (EBE)
Host Department:	Construction and Surveying
UCAS Code:	Not applicable
PSB Involvement:	Chartered Institution of Water and Environmental Management (CIWEM) Chartered Institution of Wastes Management (CIWM), Chartered Institution of Building Services Engineering, (CIBSE) Energy Institute (EI).
Place of Delivery:	Glasgow Caledonian University
Subject Benchmark Statement	Not applicable
Dates of PS Preparation/Revision:	June 2019

2 EDUCATIONAL AIMS OF THE PROGRAMME

The overall aim of the MSc Environmental Management (EM) programme is to enable students to develop an environmental specialisation, within the context of their previous qualifications and experience.

The MSc EM (Waste) Pathway is more specific, in that it allows students to develop skills and knowledge in modern waste management practices, for those who intend to pursue a career in that area.

The MSc EM (Oil and Gas) Pathway is to enable students to develop an Oil and Gas related specialisation, within the context of Energy and Environmental Management and building on their previous qualifications and experience.

The MSc EM (Water) Pathway is design to develop the knowledge and skills of students looking to develop a career in the water/wastewater sector.

Finally the MSc EM (Energy) will place specific emphasis on the environmental consequences of energy use and the opportunities through renewable energy technologies to support a low carbon economy

The broad scope of the programme is designed to stretch students' educational horizons across traditional subject boundaries, encompassing areas normally associated with engineering, biology, economics, legislation and others. Thus students will need to understand and develop technical and non-technical arguments at an advanced level.

The educational objectives of the programme are:

- to develop critical intellectual and practical skills of the students in the collection, analysis, interpretation and understanding of data related to environmental pollution;
- to provide the students with up-to-date knowledge and skills to equip them for a career in environmental management, waste management or in the oil and gas sector;
- to develop the students' competence in applying advanced skills to solve environmental problems, using a critical and holistic approach;
- to enhance students' interpersonal, communications and other transferable skills, so that they are competent to operate in senior positions in industry;
- to allow students to acquire educational qualifications which would enable them to gain recognition by professional bodies;
- to provide students with an opportunity to critically explore environmental problems with others from different educational backgrounds, hence enhancing the breadth of their viewpoints on such issues;
- to further develop the students' skills in research methods and practice, so that they can undertake advanced research in environmental, waste or oil and gas topics;
- to enable students to engage with life-long learning, research and creativity tempered with scientific discipline and social awareness.

Patterns of Delivery

Full-Time

The full-time route will serve the needs of students from a range of undergraduate programmes who wish to further their studies at advanced level, for mature students wishing a career change and for international students who wish to come to the UK to study. Full-time students would normally complete the programme in one year.

Part-Time

The pattern of delivery adopted for part-time students follows that which has been adopted across the School, where students attend for one day or two half-days per week.

All modules are web-enhanced using the Managed Learning Environment (GCU Learn) which means that both FT and PT students have access to additional learning materials and other resources.

Student Study Routes (Trimester A and Trimester B entrants)

The mode of study for full time and part time students is given in Table 2-1.

Mode of Attendance	Academic Year 1			Academic Year 2			Academic Year 3		
	Trimester			Trimester			Trimester		
	A	B	C	A	B	C	A	B	C
FT Sept start	4 Modules	4 Modules	Project						
FT Feb start		4 Modules		4 Modules	Project				
PT Sept start	2 Modules	2 Modules		2 Modules	2 Modules	Project			
PT Feb start		2 Modules		2 Modules	2 Modules		2 Modules	Project	

Table 2-1 Mode of study and trimesters

3 PROGRAMME STRUCTURE AND REQUIREMENTS, LEVELS, MODULES, CREDITS AND AWARDS

The programme follows the standard Glasgow Caledonian University model for postgraduate programmes. There are 4 modules per trimester (total 8 taught modules), each valued at 15 SHEM credit points. The Masters dissertation is a 60-credit module, normally completed during the summer months. Each 15-credit module corresponds to approximately 150 hours of notional student effort (including various forms of class contact, private study and assessment).

The programme is offered on both a full-time and part-time basis. The duration of the full time mode is one calendar year and part time students are normally expected to complete the taught modules in two years. Part time students normally attend the university one day per week studying two modules. Most of the modules have supplementary web-based material via Blackboard Virtual Learning Environment available to provide a flexible learning mean for students. The Programme Team are working towards developing web-based modules suitable for distance learning.

In each of the two trimesters students will choose four modules (part time students will choose two). All students must choose the Health, Safety and Environmental Management as part of a professional accreditation requirement. Students wishing to achieve a pathway, must choose the two subject-specific modules.

	Module Code	Module title	Trimester	Credits
Generic	MMH724008	Environmental Pollution, Monitoring & Analysis	A	15
	MMF724003	Health, Safety and Environmental Management	A	15
	MMH222327	Environmental Planning and Impact Assessment	A	15
	MMF724009	Contaminated Land and Landfill Engineering	B	15
	MMH221233	Climate Change & Carbon Management	A	15
	MMF822326	GIS and Environmental Management	B	15
	MMH223888	Climate Justice	B	15
Energy	MMJ921238	Renewable Energy Technologies	B	15
	MMH225986	Building and Energy Technology	B	15
Waste	MMH225987	Resource Management and the Circular Economy	A	15
	MMH121607	Advanced Waste Treatment Technologies	B	15
Water	MMH124004	Water Quality and Waste Water Treatment	B	15

	MMH223251	Water Resource Management and Hydrology	B	15
Oil and Gas	MMH122108	The Oil and Gas Industry	A	15
	MMH224018	Environmental Regulation and State Control of Oil and Gas	B	15
All	MMH106215	Project	A,B,C	60

Table 3-1 Overall Structure of the Programme

The following awards can be made:

PgC:

- Postgraduate Certificate (PgC) Environmental Management, for four postgraduate modules (60 SHEM credits), equivalent to 1 trimester of full-time study or 2 trimesters of part-time study;

PgD

- Postgraduate Diploma (PgD) in Environmental Management for a further four modules (total 120 SHEM credits), equivalent to 2 trimesters of full-time study or 4 trimesters of part-time study;

MSc

Master of Science (MSc) for the equivalent of a further 1 trimester of student effort (to give a total 180 SHEM credits), being a project dissertation. The MSc degree is awarded as follows:

- MSc Environmental Management for students who have completed the PgD, including four Semester A modules and four Trimester B modules and a dissertation on an environmental theme.
- MSc Environmental Management (Waste) for students who have completed the PgD, including the four Semester A modules and four modules in Semester B, including three compulsory modules for the Waste pathway and a dissertation on an approved topic related to waste management.
- MSc Environmental Management (Oil and Gas) for students who have completed the PgD, including the four Semester A modules and four modules in Semester B, including three compulsory modules for the Oil and Gas pathway and a dissertation on an approved topic related to oil and gas management.
- MSc Environmental Management (Water) for students who have completed the PgD, including the four Semester A modules and four modules in Semester B, including three compulsory modules for the Water pathway and a dissertation on an approved topic related to water management.
- MSc Environmental Management (Energy) for students who have completed the PgD, including the four Semester A modules and four modules in Semester B, including three compulsory modules for the Energy pathway and a dissertation on an approved topic related to waste management.

Selection of Taught Modules

When students first register and attend the University the Programme Leader will provide advice and guidance to help them select modules appropriate to their existing experience, their interests and future career aspirations; the aim is to match, as far as is practicable, the learning requirements specific to the student with the portfolio of modules on offer.

Students admitted to the programme will have every opportunity to complete the requirements of the programme specification. However, modules are subject to minimum and maximum numbers, and therefore it cannot be guaranteed that any specific module will be available for any specific cohort. Should a module not be available for any reason, students will be asked to select an alternative module to study.

Masters Dissertation/Project

All students are required to complete the Masters Dissertation/Project module, which is based on a significant piece of individual research. The subject of the research will be an area of special interest to the student, and will be based on a proposal written by the student and submitted to the Dissertation/Project Co-ordinator. The area of research chosen should be of the required subject and intellectual depth and should provide a suitable match with previous study. This may require increased technical depth or greater breadth of subject matter relating to previous projects, case studies or dissertation undertaken by the student.

4 ASSESSMENT REGULATIONS

The Glasgow Caledonian University Assessment Regulations apply to the MSc Environmental Management programme and its pathways with the following approved exceptions:

Awards

For the awards of Postgraduate Certificate (PgC), Postgraduate Diploma (PgD) and Masters degree:

- To qualify for an award of Postgraduate Certificate students must complete all the programme requirements and obtain a minimum of 60 SHEM credits
- To qualify for an award of Postgraduate Diploma students must complete all the programme requirements and obtain a minimum of 120 SHEM credits
- To qualify for an award of Masters degree, students must complete all the programme requirements and obtain a minimum of 180 SHEM credits

Regulations for distinction/merit

- **Merit** – The student should achieve an overall credit-weighted average of the modules between 65% to 69%, and have passed all modules included in the calculation at the first attempt.
- **Distinction** – The student should achieve an overall credit-weighted average of the modules equal to 70% or greater and have passed all modules at the first attempt with a mark of 55% or greater. In addition, the student must achieve no less than 70% in their dissertation project.

Role of External Examiners:

Senate appoints External Examiners to the Assessment Board (AB) on the basis of nominations from Schools and approval through the University QA and QE processes.

The duties of an External Examiner will include the following:

- To moderate the work of the internal examiners in respect of the assessments under his/her jurisdiction
- To attend Assessment Boards at which the results of final stage assessment will be determined
- To satisfy himself/herself that the work and decisions of the Assessment Board(s) are consistent with the policies and regulations of the University and best practice in higher education

- To ensure that students are assessed within the regulations approved by the University for the progression of students and to inform the University on any matter which, in his/her view, mitigates against the maintenance of proper academic standards
- To report annually to the Clerk to Senate on the standards attained by students on the Programme and on other matters which may seem appropriate for their report.

