

University of Plymouth

Faculty of Science and Engineering

School of Geography, Earth and Environmental Sciences

Programme Specification

**Master of Science 1905
in
Sustainable Environmental Management**

September 2021

1. MSc Sustainable Environmental Management (SEM) (1905)

Final award title: Master of Science (MSc) Sustainable Environmental Management

Level 7 Intermediate award title(s)

Completion of 60 credits: Postgraduate Certificate (PGCert)

Level 7 Intermediate award title(s)

Completion of 120 credits: Postgraduate Diploma (PgDip)

JACS code: F810 Environmental Geography

2. Awarding Institution: University of Plymouth

Teaching institution(s): University of Plymouth

3. Accrediting body – supplementary accreditation

Institute of Environmental Management & Assessment (IEMA)

Through periodic evaluation of the SEM programmes, the University of Plymouth is an Approved Training Provider of IEMA. As such, successful completion of the *MSc Sustainable Environmental Management* qualifies its graduates to become [graduate members of IEMA](#) and use the professional suffix GradIEMA

Most recent date of re-accreditation: December 2020.

4. Distinctive Features of the Programme and the Student Experience

A broad-based, vocationally-focused, training across a spectrum of issues germane to sustainable environmental management (SEM) led by academic staff with active research interests and/or direct experience in industries related to environmental management.

Supplementary accreditation by IEMA: This course is accredited by IEMA (Institute for Environmental Management and Assessment) IEMA is the professional body for everyone working in environment and sustainability. This course entitles students to free student membership for the duration of the course and on successful completion qualification for GradIEMA. Graduate membership is a launchpad for future leaders within environment and sustainability and offers a range of benefits to support graduates throughout their career. It is possible to then “Fast track” to Practitioner

Membership (PIEMA) following successful completion of the work-based assessment of competence.

IEMA's reviews of the programme have noted the variety of teaching methods, external speakers and field visits as well as the strong focus on the management of the environment, rather than on management of an organisation's impact on the environment, and on the role and importance of policy, rather than just learning what the policies are.

Compulsory modules providing an interdisciplinary foundation to the topic, its core philosophy, policy and regulatory matters, a tailored variety of enabling skills and methods, and practical work experience.

Complementary option modules providing specialist applications of the core knowledge within the context of thematic environments such as contaminated environments, biological freshwater systems and climate, reflecting the research expertise of contributing academic staff.

Research-informed modules, designed specifically for this degree rather than arising as an 'applied addendum' to basic research interests. Students frequently find dissertation topics directly related to on-going research projects of academic staff.

Staff offer an enthusiastic and intensive learning environment: Our External Examiners noted that the strength of the modules lies not only in their content but also in the enthusiasm and commitment of the staff who teach them.

Emphasis on field-based experiential learning wherever possible, including a compulsory residential field course with exercises based around 'real-life' regional challenges for sustainable environmental management, as outlined by, for example, cooperating tourist businesses, farmers, conservationists, land managers, industrialists and government agency staff.

Coursework assignments designed to test students across a range of presentation styles (written, oral, graphic, debates, etc.) in preparation for employment.

Involvement of 'industry' guest speakers allowing motivated students to develop an embryonic contact network. Such networks regularly result in volunteering opportunities and/or topics for dissertation research and can lead to full-time employment.

5. Relevant QAA Subject Benchmark Group(s)

There is no direct QAA benchmark statement for Environmental Management. The closest subject benchmarks are in [Geography](#) and [Earth Sciences, environmental sciences and environmental studies](#). The programmes also align with the [QAA Master degree characteristics statement](#).

6. Programme Structure

The MSc Sustainable Environmental Management (SEM) programme is part of a suite of Masters subjects offered by the School of Geography, Earth and Environmental Sciences (SoGEES). SEM is offered as an MSc and as an MRes programme. The MSc programme is structured into a semester system, as outlined in Figure 1, with each taught module worth 20 credits, equating to approximately 200 hours of student work. The MSc degree comprises 120 taught credits and an additional 60-credit dissertation, emphasizing its taught, vocational outlook.

The three core modules in semester one provide a comprehensive grounding in the philosophy and methods of environmental management. *'Environmental knowledge: from field to stakeholder'* (GEES519) is a School-wide training module in research skills and methods with pathways focused on social or physical sciences, benefitting the breadth of student interests on the SEM degree. *Science, society and environmental governance* (GEES516) is the capstone module for the general philosophy of SEM and, as the title suggests, provides an integrated introduction to topics on the theme of SEM. Finally, the module *Professional Practice in the Environmental Sector* (GEES515) introduces the concepts and principles of both environmental law and economics, and supports students in both finding a placement position and developing career readiness.

In semester two, the core module on the regulatory framework for environmental impact assessment (*GEES517 Environmental Assessment*) is paired with a thematic 'application-based' option module on *Climate Change: science and policy* (GEES506), *Investigation and Assessment of Contaminated Environments* (ENVS5002). All students then undertake a substantial work placement, which may be based in Plymouth or elsewhere.

Students are challenged to consider their dissertation topic during semester one within the *'Environmental Knowledge'* module. Students are allocated to a dissertation supervisor through this module and refine their topic through further meetings in semester two, with the intention that they are fully ready to begin their research following the completion of semester two coursework.

Figure 1: MSc Sustainable Environmental Management : programme structure

Semester 1	GEES519 (20 credits)	GEES515 (20 credits)	GEES516 (20 credits)
	Environmental Knowledge : from field to stakeholder	Professional Practice in the Environmental Sector	Science, Society and environmental governance
Semester 2	GEES517 (20 credits)	Optional module (20 credits) one from :	
	Environmental Assessment	ENVS5002 Investigation & assessment of contaminated environments	GEES506 Climate Change (science and policy)
	GEES518 Professional experience in environmental management (20 credits); this can be extended in to the summer semester where necessary		
GEES520 MSc Dissertation			

7. Programme Aims

The general aim of the MSc programme is to provide postgraduates with a comprehensive knowledge and understanding of the physical and social scientific basis of sustainable environmental management, relevant to the needs of professional practice and research.

The MSc programme is designed to provide a broadening experience for graduates from a variety of disciplines, as well as giving in-depth knowledge and high level skills in specific subjects. The MSc is also regarded as being vocationally oriented. It is envisaged that MSc postgraduates will want to take up employment in a wide range of industrial and professional occupations, for example in consultancies, in regulatory authorities, in government agencies, in non-governmental organisations and the environmental industry more generally.

The specific aims of the MSc SEM programme are to:

- develop confident, adaptable and independent environmental management professionals who are committed to life-long learning and are highly employable
- offer a broad interdisciplinary and contemporary view of sustainable environmental management facilitated by exposure to academic staff who are scholarly and/or practical leaders in their fields
- promote critical, rational, innovative, reflective and creative thinking about environmental management issues
- develop knowledge of a wide variety of research methods and assessment techniques relevant to quantitative and qualitative environmental data sets and management applications
- develop an extensive range of intellectual and analytical skills related to problem formulation, strategic analysis, problem solving, team-working and effective communication using a variety of media
- provide experiential learning opportunities for assimilating environmental management knowledge through practical work and fieldwork
- promote the ability to design, conduct and report original research relevant to environmental management, including an awareness of issues involved in research with human participants, including issues of validity, reliability and ethical considerations

8. Programme Intended Learning Outcomes

8.1. Knowledge and understanding

On successful completion, graduates should be able to demonstrate a systematic knowledge and understanding of:

1. **Theoretical and research-based knowledge:** at the forefront of sustainable environmental management
2. **Techniques and methodologies:** applicable to analysing issues in sustainable environmental management
3. **Environmental processes:** the outcomes of humans interactions with their environment and the process implications of these interactions for sustainable management practices in the context of environmental change
4. **Political and institutional frameworks:** related to policy development and implementation in environmental management

8.2. Cognitive and intellectual skills

On successful completion, graduates should be able to demonstrate the cognitive and intellectual skills of:

1. **Analysis:** the ability to undertake analysis of complex, incomplete or contradictory areas of knowledge with critical awareness, including problem formulation and solving
2. **Synthesis:** the ability to critically assess, validate and synthesise multidisciplinary evidence from disparate sources in a manner that may be innovative, utilising knowledge or processes from the forefront of sustainable environmental management
3. **Evaluation:** development of a level of conceptual competency that allows a reasoned evaluation of research, advanced scholarship and methodologies and the development of arguments for alternative approaches to sustainable practices in environmental management
4. **Application:** to demonstrate initiative and originality in problem solving, acting independently to plan and implement tasks at a professional or equivalent level, making decisions in complex situations

8.3. Key and transferable skills

On successful completion, graduates should be able to demonstrate the key and transferable skills of:

1. **Effective information sourcing:** using a full range of learning resources
2. **Collation, analysis and interpretation of data:** in quantitative and qualitative forms independently and with minimum guidance
3. **Communication:** of ideas, principles and theories confidently and effectively by oral, written and visual means
4. **Use of appropriate computer and information technology:** including the internet, word-processing, graphics, spreadsheets, presentation and specialist software packages
5. **Independent working:** to organise his/her own learning autonomously
6. **Effective and supportive participation:** in groups, managing their own requirements while meeting obligations to others
7. **Self-reflection:** on his/her own learning and evaluation of personal strengths and weaknesses

8.4. Employment related skills

On successful completion, graduates should be able to demonstrate the employment-related skills of:

1. **Applying knowledge:** to a variety of practical situations in the pursuit of sustainable approaches to environmental management
2. **Project design and execution:** to be capable of planning and carrying out a project, presenting its results and discussing its implications
3. **Effective reflection:** in action planning for personal and career development
4. **Life-long learning:** To appreciate the importance of life-long learning and reflect critically on their career plans and skills needs for continuing professional development

8.5. Practical skills

On successful completion, graduates should be able to demonstrate the practical skills of:

1. **Critical investigation:** identifying, formulating and resolving complex problems and research questions using good scientific practises and contemporary methods in environmental management
2. **Data collection:** including primary and secondary data collection, including fieldwork
3. **Data analysis:** utilising manual and computer-based analysis of quantitative and qualitative data with precision and effectiveness, adapting skills or procedures for new situations
4. **Reporting original research:** planning, design, execution and report writing using personal initiative

9. Admissions Criteria, including APCL, APEL and DAS arrangements

The admissions policy for the programme complies with the University Policy of Admissions to Postgraduate Taught Programmes of Study.

The Programme Leader (who is also responsible for admissions) will use the criteria below as a guide in making admissions decisions. Wherever possible, established relationships or equivalencies to other national or international qualifications will be used in making decisions. Admissions are administered through the University Postgraduate Admissions Office.

Students admitted to the MSc programme are expected to have a good Honours degree in a relevant discipline (e.g., geography, environmental science, biological conservation, sociology, business, economics, engineering, history, geosciences, biological sciences or otherwise suitably qualified candidates). The Programme Leader will be responsible for ensuring that applicants have, through prior learning (formal study and/or experience) in the critical subject areas, developed the requisite knowledge, understanding and skills required for the successful participation in this programme. The suitability of candidates will be assessed through a combination of the written application, evidence of formal qualifications, personal references and candidate interviews (where appropriate).

The final decision of whether a candidate takes the MSc or MRes in Sustainable Environmental Management rests with the Admissions Tutor. Transfer between MSc and MRes is possible up until the end of the first semester, following agreement between the candidate and Programme Leader.

In compliance with the University's policies of equality and diversity, and disability, all appropriately qualified applicants will be given equal consideration during the

selection process. The University welcomes applications from people with disabilities and the support available is described [here](#).

Entry requirements (in summary):

- Normally an honours degree (Second class upper division or better) in a relevant discipline (e.g., geography, environmental science, biological conservation, sociology, business, economics, engineering, history, geosciences, biological sciences or otherwise suitably qualified candidates) OR overseas equivalent.
- A minimum grade C in English Language at GCSE level OR a minimum overall score of 6.5, with a minimum of 5.5 in each of listening, reading, speaking and writing in IELTS.

Overseas applicants must have proficiency in English that is in accordance with the current university regulations as described above. Completion of an English language course prior to commencing the programme may be recommended to students for whom English is not their first language.

Accreditation of Prior Certificated Learning (APCL): Students can exceptionally apply for exemption from any modules through APEL or APCL, following standard University procedures, described in the University's [academic regulations](#) on admissions

Any non-standard academic entrant onto the programme is strongly encouraged to seek support from the University's [Learning Gateway](#) team before commencing their studies, as well as during the programme. This support will be additional to any support provided by staff on the MSc SEM programme. The onus is on the student to ensure that they are aware of the requirements of higher education study at Masters level and to seek appropriate help and support where extra guidance and tuition is considered necessary. Early feedback on coursework and discussions with module leaders and personal tutor will identify cases where such support would be advisable.

10. Progression criteria for Final and Intermediate Awards

Progression criteria for final and intermediate awards, including for the award of MSc with merit or distinction, follow the standard University regulations.

11. Exceptions to Regulations

None

12. Transitional Arrangements

Students who are unsuccessful in 2021-22 and must repeat modules in 2022-23 will be advise individually of the most appropriate diet of modules.

Transfer from MSc SEM (1905) to MRes SEM (1911)

It is possible for students originally enrolled on the MSc SEM to transfer at the end of the first semester onto the MRes programme. It is the usual expectation that any candidates will have met the entry requirements for the MRes degree.

Potential transfers are assessed individually on the basis of student ability, the suitability of the chosen topic for extended research to the level of an MRes dissertation, and the availability of necessary supervision. Such transfers require the explicit support of the dissertation supervisor.

13. Mapping and Appendices

13.1. Programme Intended Learning Outcomes mapped against module content. All modules have the GEES prefix unless otherwise stated

PROGRAMME INTENDED LEARNING OUTCOME	Assessed in modules
-------------------------------------	---------------------

KNOWLEDGE AND UNDERSTANDING	
1. Theoretical and research-based knowledge: at the forefront of sustainable environmental management	GEES516, GEES517, option modules
2. Techniques and methodologies: applicable to analysing issues in sustainable environmental management	GEES519, GEES517, GEES520, option modules
3. Environmental processes: the outcomes of humans interactions with their environment and the process implications of these interactions for sustainable management practices in the context of environmental change	GEES516, GEES518, option modules
4. Political and institutional frameworks: related to policy development and implementation in environmental management	GEES515, GEES516, option modules

COGNITIVE AND INTELLECTUAL SKILLS	
1. Analysis: the ability to undertake analysis of complex, incomplete or contradictory areas of knowledge with critical awareness, including problem formulation and solving	GEES519, GEES520
2. Synthesis: the ability to critically assess, validate and synthesise multidisciplinary evidence from disparate sources in a manner that may be innovative, utilising knowledge or processes from the forefront of sustainable environmental management	GEES519, GEES520
3. Evaluation: development of a level of conceptual competency that allows a reasoned evaluation of research, advanced scholarship and methodologies and the development of arguments for alternative approaches to sustainable practices in environmental management	GEES519, GEES520, GEES516, optional modules

4. Application: to demonstrate initiative and originality in problem solving, acting independently to plan and implement tasks at a professional or equivalent level, making decisions in complex situations	GEES518, GEES520, optional modules
---	------------------------------------

KEY AND TRANSFERABLE SKILLS	
1. Effective information sourcing: using a full range of learning resources	All modules
2. Collation, analysis and interpretation of data: in quantitative and qualitative forms independently and with minimum guidance	GEES519, GEES520, GEES517
3. Communication: of ideas, principles and theories confidently and effectively by oral, written and visual means	All modules
4. Use of appropriate computer and information technology: including the internet, word-processing, graphics, spreadsheets, presentation and specialist software packages	GEES519, GEES520, GEES517
5. Independent working: to organise his/her own learning autonomously	All modules
6. Effective and supportive participation: in groups, managing their own requirements while meeting obligations to others	GEES516, GEES517
7. Self-reflection: on his/her own learning and evaluation of personal strengths and weaknesses	GEES515, GEES518

EMPLOYMENT RELATED SKILLS	
1. Applying knowledge: to a variety of practical situations in the pursuit of sustainable approaches to environmental management	GEES516, GEES520, GEES517
2. Project design and execution: to be capable of clearly and coherently presenting the results and discussing the implication of independent research	GEES519, GEES520
3. Effective reflection: in action planning for personal and career development	GEES515

<p>4. Life-long learning: To appreciate the importance of life-long learning and reflect critically on their career plans and skills needs for continuing professional development</p>	<p>GEES515</p>
---	----------------

<p>PRACTICAL SKILLS</p>	
<p>1. Critical investigation: identifying, formulating and resolving complex problems and research questions using good scientific practises and contemporary methods in environmental management</p>	<p>GEES519, GEES520, GEES517</p>
<p>2. Data collection: including primary and secondary data collection, including fieldwork</p>	<p>GEES519, GEES520, GEES517</p>
<p>3. Data analysis: utilising manual and computer-based analysis of quantitative and qualitative data with precision and effectiveness, adapting skills or procedures for new situations</p>	<p>GEES519, GEES520, GEES517</p>
<p>4. Reporting original research: planning, design, execution and report writing using personal initiative</p>	<p>GEES520</p>

13.2. Assessment against Modules Mapping

Module code	Module title	Compulsory or optional module	Course work	Practical	Other
GEES519	Environmental Knowledge: from field to stakeholder	Compulsory	100%		
GEES515	Professional practice in the environmental sector	Compulsory	100%		P/F
GEES516	Science, society and environmental governance	Compulsory	50%	50%	
GEES517	Environmental Assessment	Compulsory	80%	20%	
GEES518	Professional experience in environmental management	Compulsory (topic selected by student)	100%		
GEES520	MSc Dissertation – 60 credits	Compulsory (topic selected by student)	100%		
ENVS5002	Investigation & assessment of contaminated environments	Optional	100%		
GEES506	Climate Change (science & policy)	Optional	100%		