

# Programme Specification: Post Graduate Taught For students starting in Academic Year 2024/25

## 1. Course Summary

Names of programme and award title(s)	MSc Environmental Sustainability and Green Technology
Award type	Taught Masters
Mode of study	Full-time Part-time
Framework of Higher Education Qualification (FHEQ) level of final award	Level 7
Normal length of the programme	1 year full-time or 2 years part-time
Maximum period of registration	The normal length as specified above plus 3 years
Location of study	Keele Campus
Accreditation (if applicable)	IEMA (The Institute of Environmental Management & Assessment)
Regulator	Office for Students (OfS)
	UK students:
	Full-time fee for 2024/25 is £11,000
Tuition Fees	Part-time fee for 2024/25 is £6,000 per year*
	International students:
	Full-time fee for 2024/25 is £20,700

**How this information might change:** Please read the important information at <a href="http://www.keele.ac.uk/student-agreement/">http://www.keele.ac.uk/student-agreement/</a>. This explains how and why we may need to make changes to the information provided in this document and to help you understand how we will communicate with you if this happens.

## 2. Overview of the Programme

The world is facing increasing environmental threats which are posing severe scientific, social and economic challenges to the human race. These challenges include: the depletion of natural resources, the loss of diversity and the need to develop new forms of energy generation whilst efficiently utilising existing energy sources. Tackling these environmental problems and establishing a sustainable environment requires the adoption of appropriate policies and managerial strategies. The interdisciplinary nature of this postgraduate course provides a broad understanding of these environmental problems whilst embedding the appropriate specialist scientific, managerial and generic skills for a career in the environmental sustainability sector.

The course incorporates Keele University's internationally recognised expertise in research and teaching on environmental issues. It is taught by a team of environmental specialists working in the fields of environmental technologies, climate change science, biological sciences, chemical science, project management, and

<sup>\*</sup> We reserve the right to increase fees in subsequent years of study by an inflationary amount. Please refer to the accompanying Student Terms & Conditions for full details. Further information on fees can be found at <a href="http://www.keele.ac.uk/studentfunding/tuitionfees/">http://www.keele.ac.uk/studentfunding/tuitionfees/</a>

environmental social science, policy and politics.

The MSc in Environmental Sustainability and Green Technology is designed to provide an interdisciplinary understanding of environmental challenges whilst giving the opportunity to specialise in several sustainability themes related to geosciences, energy generation, biological science, green information technology, environmental policy and politics, and project management. The course is designed to allow students to develop a portfolio of knowledge, experience and skills strongly aligned to support their career aspirations.

Our unique interdisciplinary course leads our graduates into a diverse range of careers. Graduates from this programme have chosen careers in research; in local, regional and national government; multi-national corporations; environmental consultancies and charities. For more information on what our graduates are doing now, visit: <a href="https://www.keele.ac.uk/gge/applicants/postgraduatetaughtpgtcourses/msc-esgt/employmentcasestudies/">https://www.keele.ac.uk/gge/applicants/postgraduatetaughtpgtcourses/msc-esgt/employmentcasestudies/</a>.

## 3. Aims of the programme

Successful students will gain:

- An understanding of knowledge in the areas of science, technology, policy and green political theory relevant to environmental sustainability
- Experience in analytical and computer techniques which would allow them to contribute to the solving of environmental challenges
- A conceptual understanding to evaluate critically current research and advance scholarship in environmental sustainability
- A comprehensive understanding of experimental design, planning and scientific techniques within a research project
- Problem-solving and team-working skills relevant to the implementation of sustainable technologies and policies

## 4. What you will learn

The intended learning outcomes of the programme (what students should know, understand and be able to do at the end of the programme), can be described under the following headings:

- Subject knowledge and understanding
- Subject specific skills
- Key or transferable skills (including employability skills)

#### Subject knowledge and understanding

Successful students will be able to:

- Demonstrate an understanding of knowledge in the areas of science, technology, policy and green political theory relevant to environmental sustainability
- Demonstrate competency using analytical and computer techniques which would allow them to contribute to the solving of environmental challenge
- Use a conceptual understanding to critically evaluate current research and advance scholarship in environmental sustainability

#### Subject specific skills

Successful students will be able to:

• Apply a comprehensive understanding of experimental design, planning and scientific techniques within a research project

#### Key or transferable skills (including employability skills)

Successful students will be able to:

 Use problem-solving and team-working skills relevant to the implementation of sustainable technologies and policies

#### The Keele Graduate Attributes

The Keele Graduate Attributes are the qualities (skills, values and mindsets) which you will have the opportunity

to develop during your time at Keele through both the formal curriculum and also through co- and extracurricular activities (e.g., work experience, and engagement with the wider University community such as acting as ambassadors, volunteering, peer mentoring, student representation, membership and leadership of clubs and societies). Our Graduate Attributes consist of four themes: **academic expertise**, **professional skills**, **personal effectiveness**, **and social and ethical awareness**. You will have opportunities to engage actively with the range of attributes throughout your time at Keele: through your academic studies, through selfassessing your own strengths, weaknesses, and development needs, and by setting personal development goals. You will have opportunities to discuss your progress in developing graduate attributes with, for example, Academic Mentors, to prepare for your future career and lives beyond Keele.

## 5. How is the programme taught?

The course can be completed as a full time course over one year or as a two-year part time programme. Students can start the course either at the start of Semester 1 or at the start of Semester 2. The MSc programme comprises 120 credits of taught 15- or 30-credit modules and a 60-credit Dissertation developed from an independent research project. Students can undertake their project either at Keele University, or in collaboration with an external industrial or public sector partner. This structure allows students to obtain a postgraduate certificate (60 credits) or a postgraduate diploma (120 credits) depending on the number of modules studied. Modules are assessed by assignment and/or examination. The Dissertation involves the submission of a 15-20,000 word report that is undertaken by the student in conjunction with an academic supervisor and, where appropriate, an external collaborator.

The course is structured into two taught terms and one term where students complete the independent research project and Dissertation. The taught component is underpinned by a foundation of core modules covering sustainable technologies and environmental politics, academic and research skills, project planning and management. These modules equip students with relevant analytical and management skills and knowledge necessary to complete their research project under the supervision of a Keele member of the teaching and research staff and, where appropriate an external collaborator from industry.

Students specialise by choosing from a range of options that align their skills and knowledge with their career aspirations. Interdisciplinary combinations are encouraged. Lectures are delivered by staff experienced in relevant research and teaching areas and external experts and industry leaders. This provides students with a real-world context and commercial awareness that enhances their employability. Student-led learning in Case Studies provides the necessary teamwork and problem-solving skills to formulate strategies to address a range of environmental and sustainability challenges.

Virtual support is provided throughout the course. Learning resources and support are made available online via the Keele Learning Environment (KLE).

## 6. Teaching Staff

The course is delivered by a Course Director, and a core teaching team drawn from GGE staff (see: <a href="https://www.keele.ac.uk/gge/people/">https://www.keele.ac.uk/gge/people/</a>)

All academic staff are active in relevant research areas and many are involved in collaborations, consultancy work and strategic developments with industrial and commercial development of energy and clean technology nationally and internationally. In addition, many staff are involved in outreach, public engagement and media activities.

The University will attempt to minimise changes to our core teaching teams, however, delivery of the programme depends on having a sufficient number of staff with the relevant expertise to ensure that the programme is taught to the appropriate academic standard.

Staff turnover, for example where key members of staff leave, fall ill or go on research leave, may result in changes to the programme's content. The University will endeavour to ensure that any impact on students is limited if such changes occur.

## 7. What is the structure of the programme?

There are two types of module delivered as part of your programme. They are:

- Compulsory modules a module that you are required to study on this programme
- Optional modules these allow you some limited choice of what to study from a list of modules

Year		Optional	
Teal	Compusory	Min	Max
Level 7	120	60	60

The structure of the programme is as follows:

#### **Full-time students**

September start:

Period	Modules	Module Code
Sem 1 Autumn-Spring	Project Management and Business Skills (15 credits)	ESC-40091
	Option Modules (45 credits)	
Sem 2 Spring-Summer	Case Studies in Sustainability and Sustainability Technologies (30 credits)	ESC-40095
	Research Design (15 credits)	ESC-40093
	Option Module (15 credits)	
Sem 3 Summer- Autumn	Dissertation (60 credits)	ESC-40089

## January start:

Sem 2 Spring-Summer	Case Studies in Sustainability and Sustainability Technologies (30 credits)	ESC-40095
	Research Design (15 credits)	ESC-40093
	Option Module (15 credits)	
Sem 3 Summer-Autumn	Dissertation (60 credits)	ESC-40089
Sem 1 Autumn-Spring	Project Management and Business Skills (15 credits)	ESC-40091
	Option Modules (45 credits)	

#### Part time students:

September start:

Sem 1-1 Autumn-Spring	Project Management and Business Skills (15 credits)	ESC- 40091
	Option Module (15 credits)	
Sem 2-1 Spring-Summer	Case Studies in Sustainability and Sustainability Technologies (30 credits)	ESC- 40095
Sem 3-1 Summer- Autumn	Start Dissertation	ESC- 40089
Sem 1-2 Autumn-Spring	Option Modules (30 credits)	
Sem 2-2 Spring-Summer	Research Design (15 credits)	ESC- 40093
	Option Module (15 credits)	
Sem 3-2 Summer- Autumn	Complete Dissertation (60 credits)	ESC- 40089

### January start:

Sem 2-1 Spring -Summer	Case Studies in Sustainability and Sustainability Technologies (30 credits)	ESC- 40095
Sem 3-1 Summer- Autumn	Start Dissertation	ESC- 40089
Sem 1-1 Autumn-Spring	Project Management and Business Skills (15 credits)	ESC- 40091
	Option Module (15 credits)	
Sem 2-2 Spring-Summer	Research Design (15 credits)	ESC- 40093
	Option Module (15 credits)	
Sem 3-2 Summer- Autumn	Complete Dissertation (60 credits)	ESC- 40089
Sem 1-2 Summer- Autumn	Option Modules (30 credits)	

Year	Compulsory	Optional		
leai	Compuisory	Min	Max	
Level 7	120	60	60	

## **Module Lists**

## Level 7

Compulsory modules	Module Code	Credits	Period
Project Management and Business Skills	ESC-40091	15	Semester 1
Research Design	ESC-40093	15	Semester 2
Case Studies in Sustainability and Sustainability Technologies	ESC-40095	30	Semester 2
Dissertation	ESC-40089	60	Semester 2-3

Optional modules	Module Code	Credits	Period
Academic English for Postgraduate Science Students	ENL-40005	15	Semester 1
Green IT	ESC-40047	15	Semester 1
Clean and Green Technologies	ESC-40097	30	Semester 1
Collaborative Project	ESC-40101	15	Semester 1
Key Themes in Human Geography and Sustainability	GEG-40020	15	Semester 1
Advanced Traineeships in Geography, Geoscience and Sustainability	GEG-40030	15	Semester 1
Development and Climate Justice (Masters)	GEG-40034	15	Semester 1
International Environmental Law	LAW-40043	15	Semester 1
Academic English for Postgraduate Science Students	ENL-40005	15	Semester 2
Climate Change Science	ESC-40060	15	Semester 2
Collaborative Project	ESC-40101	15	Semester 2
Advanced GIS and Remote Sensing	ESC-40109	15	Semester 2
Advanced Methods in Human Geography and Sustainability	GEG-40018	15	Semester 2
Advanced Traineeships in Geography, Geoscience and Sustainability	GEG-40030	15	Semester 2

#### **Level 7 Module Rules**

ESC-40101 Collaborative Project and GEG-40030 Advanced Traineeships in Geography, Geoscience and Sustainability: students may enrol for only one of these two options.

#### **Notes on Optional modules:**

**Academic English for Postgraduate Students - ENL-40005** (15 credits) An advanced English module for international students who are undertaking postgraduate study at Keele University and have been evaluated as needing academic English support by the Language Learning Unit. The module develops the specific vocabulary, writing, critical reading, oral communication and study skills needed for success with academic assignments at postgraduate level. A student's placement on ENL-4005 based on a diagnostic language assessment on arrival and completed in their first Semester at Keele. This module can be included in the degree as an additional 15 credits.

Details of individual modules can be viewed online at:

http://www.keele.ac.uk/gge/students/mscenvironmentalsustainabilitygreentechnology/

#### **Learning Outcomes**

The table below sets out what students learn in the programme and the modules in which that learning takes place. Details of how learning outcomes are assessed through these modules can be found in module specifications.

Subject Knowledge and Understanding	
Learning Outcome	Module in which this is delivered
Demonstrate an understanding of knowledge in the areas of science, technology, policy and green political theory relevant to environmental sustainability	Project Management and Business Skills - ESC-40091 Clean and Green Technologies - ESC-40097 Advanced GIS and Remote Sensing - ESC-40109 Advanced Methods in Human Geography and Sustainability - GEG-40018 Development and Climate Justice (Masters) - GEG- 40034 Collaborative Project - ESC-40101 Key Themes in Human Geography and Sustainability - GEG-40020 Advanced Traineeships in Geography, Geoscience and Sustainability - GEG-40030 Green IT - ESC-40047 Climate Change Science - ESC-40060 Research Design - ESC-40093 Case Studies in Sustainability and Sustainability Technologies - ESC-40089 All modules
Demonstrate competency using analytical and computer techniques which would allow them to contribute to the solving of environmental challenge	Green IT - ESC-40047 Project Management and Business Skills - ESC-40091 Climate Change Science - ESC-40060 Advanced GIS and Remote Sensing - ESC-40109 ESC-40091 ESC-40047 ESC-40060
Use a conceptual understanding to critically evaluate current research and advance scholarship in environmental sustainability	Project Management and Business Skills - ESC-40091 Key Themes in Human Geography and Sustainability - GEG-40020 Advanced GIS and Remote Sensing - ESC-40109 Advanced Methods in Human Geography and Sustainability - GEG-40018 Development and Climate Justice (Masters) - GEG- 40034 Dissertation - ESC-40089 Case Studies in Sustainability and Sustainability Technologies - ESC-40095 Research Design - ESC-40093 ESC-40091 ESC-40093 ESC-40095 GEG-40020 ESC- 40089 PIR-40106 ESC-40085 GEG-40018

Subject Specific Skills		
Learning Outcome	Module in which this is delivered	
Apply a comprehensive understanding of experimental design, planning and scientific techniques within a research project	Advanced Methods in Human Geography and Sustainability - GEG-40018 Dissertation - ESC-40089 Advanced Traineeships in Geography, Geoscience and Sustainability - GEG-40030 Collaborative Project - ESC-40101 Research Design - ESC-40093 ESC-40089 ESC-40101 ESC-40089 GEG-40030 ESC-40093 GEG-40019	

Key or Transferable Skills (graduate attributes)		
Learning Outcome	Module in which this is delivered	
Use problem-solving and team-working skills relevant to the implementation of sustainable technologies and policies	Clean and Green Technologies - ESC-40097 Collaborative Project - ESC-40101 Green IT - ESC-40047 Case Studies in Sustainability and Sustainability Technologies - ESC-40095 Dissertation - ESC-40089 Development and Climate Justice (Masters) - GEG-40034 Project Management and Business Skills - ESC-40091 ESC-40091 ESC-40089 ESC-40101 ESC-40097 ESC-40095 ESC-40097 GEG-40034	

#### 8. Final and intermediate awards

Master's Degree	You will require at least 150 credits at Level 7
Postgraduate Diploma	You will require at least 90 credits at Level 7
Postgraduate Certificate	You will require at least 40 credits at Level 7

#### 9. How is the Programme Assessed?

The variety of assessment in the course ensures students develop employability, research and academic skills, appropriate for a career in research or industry. The assessments promote independent learning, student autonomy and responsibility for personal learning and the development of problem solving skills. Students are tested on more than just their ability to recall information but are taught to develop their ability and confidence in contextualising and using information to solve problems and to discuss complex issues related to sustainability and energy.

The use of essays and written assessments in several modules and a literature review in the Dissertation module gives the students experience in forming academic literacy skills in professional writing, critical evaluation of peer reviewed articles, finding, evaluating and applying information and articulating knowledge.

Presentation skills are important for employability. These are developed and evidenced through the use of oral and poster presentations. This enables students to demonstrate an understanding of knowledge in the areas of science, technology, policy and green political theory relevant to environmental sustainability.

Research design and project management are key skills in both academia and industry. The modules support assessment where students design and submit for assessment a detailed project scope and plan based and prepare a mock research proposal for submission to EPSRC. This introduce the student to the process and level of detail needed to compete for funding.

Students who do not speak English as a first language, or international students new to the UK Higher Education system and identified as needing support in Academic English skills, have the option to take an appropriate course, ENL-40005, which will develop the student's skills to help prepare their coursework assessments effectively. This is particularly valuable to support attainment in their collaborative project or Dissertation at KeeleUniversity.

The Dissertation module represents the culmination of the programme, providing an opportunity for students to combine key learning outcomes from across the programme and to begin to take real responsibility for the formulation, management, conductance and final interpretation and presentation of a new piece of scientific research

Reflection is a key tool employed by practicing professionals to evidence their professional development and to identify areas for further development. Students submit a reflective essay during the Case Studies module which allows space to digest and contextualise theoretical and general information during lectures, site visits, class debates around ethically controversial issues related to energy development and sustainability, and class presentations on specific issues. This reflective essay allows the student to articulate their own thoughts and ideas on the subject matter covered in the module and for them to identify their skills and knowledge gaps for further development

Students build confidence and competency via informal assessment feedback, both written and verbal, on

performance throughout the course during student-led debates, presentations and during non-assessed fieldwork.

Marks are awarded for summative assessments designed to assess your achievement of learning outcomes. You will also be assessed formatively to enable you to monitor your own progress and to assist staff in identifying and addressing any specific learning needs, in conversation with your assigned Academic Mentor. Feedback, including guidance on how you can improve the quality of your work, is also provided on all summative assessments within three working weeks of submission, unless there are compelling circumstances that make this impossible, and more informally in the course of tutorial and seminar discussions.

#### 10. Accreditation

This programme is accredited by IEMA (The Institute of Environmental Management & Assessment). Students who successfully complete this course automatically qualify for GradIEMA professional status which is recognised in the marketplace. Students can also fast track to PIEMA (Practitioner Status) on completion of a work based competence assessment.

## 11. University Regulations

The University Regulations form the framework for learning, teaching and assessment and other aspects of the student experience. Further information about the University Regulations can be found at: <a href="http://www.keele.ac.uk/student-agreement/">http://www.keele.ac.uk/student-agreement/</a>

If this programme has any exemptions, variations or additions to the University Regulations these will be detailed in an Annex at the end of this document titled 'Programme-specific regulations'.

#### 12. What are the typical admission requirements for the Programme?

See the relevant course page on the website for the admission requirements relevant to this programme: https://www.keele.ac.uk/study/

It is expected that applicants will already hold an honours degree in a scientific discipline appropriate to the area of their intended Dissertation research project area although consideration will be given to related programmes. The minimum degree category for entry onto this programme is 2:2, in line with the 50% pass mark required for successful completion of this course. Consideration will be given to candidates who do not meet these criteria, but can evidence appropriate, alternative professional qualifications and/or experience.

Applicants who have not had their secondary or tertiary education through the medium of English are expected to have attained the equivalent of an IELTS score of at least 6.5 (with no sub-test lower than 5.5) from an IELTS provider which is approved by Keele University.

**ENL-40005** All new international students entering the university will sit a diagnostic language assessment. Using this assessment, the Language Centre may allocate you to an English language module which will become compulsory. NB: students can take an ENL module only with the approval of the English Language Programme Director and are not able to take any other Language modules in the same academic year.

**Recognition of Prior Learning (RPL)** is considered on a case-by-case basis and those interested should contact the Programme Director. The University's guidelines on this can be found here: <a href="https://www.keele.ac.uk/ga/programmesandmodules/recognitionofpriorlearning/">https://www.keele.ac.uk/ga/programmesandmodules/recognitionofpriorlearning/</a>

## 13. How are students supported on the programme?

The Programme Director is responsible for overseeing the course and organising induction sessions for new students. This includes introductory talks on content, teaching and assessment methods during the course, points of contact for support, library services, avoiding plagiarism, procedures for accessing support and how to access and use the KLE, including a mock assignment so students can gain experience in using the KLE and receiving feedback. This reassures students and sets out clear expectations to students about academic standards and conduct and responsibilities of staff and student s. After this initial introduction, students can contact the Programme Director directly about problems and concerns either directly during agreed office hours, by appointment and/or by email and telephone.

Each student has access to an Academic Mentor who acts as an important point of contact for general advice and guidance on academic and career development and other pastoral issues. Academic Mentor meet with their students in the first week and at regular points during the course offering advice and support and signposting to other specialist support services in the University where appropriate.

Module leaders are available either directly or indirectly via email for module-specific problems. One-to-one meetings can be arranged as necessary for student consultation. It is the responsibility of module leaders to ensure that appropriate feedback is provided to all students regarding both formative and summative

assessment. They will ensure that such feedback is of a high quality and delivered in a timely fashion.

Students are assigned a supervisor and a co-supervisor during the Dissertation module. This ensures that consistent supervision can be provided during the summer months when the dissertation project is carried out even if a supervisor is away for extended periods, for example, on fieldwork. In line with modern and sustainable practices supervision meetings can also be conducted via videoconferencing which can reduce carbon footprint from travel and also allows for continuity of supervision if the supervisor is away or the student has a remotely-based project.

Students are encouraged to participate in the Student Staff Voice Committee (SSVC). This is a student voice mechanism that gives student representatives, elected by their peers, an opportunity to give valuable feedback on the course content and delivery. All students are entitled and encouraged to make use of all central university services, including the Keele Postgraduate Association.

#### 14. Learning Resources

The programme is taught in modern teaching rooms across the University which are have computers, internet access and projection equipment. Rooms may be arranged either in traditional lecture format or more informally to allow students to work together in small groups. Much of the teaching for the MSc in Environmental Sustainability & Green Technology takes place in the William Smith Building. Students have access to flexible teaching spaces, a dedicated computer suite and a range of rooms for study and group study with Wi-Fi access. Students are also able to interact with the on-site technologies at Keele including:

- Solar thermal and PV
- Climate control, underfloor heating and smart lighting systems
- Rainwater harvesting and waterless urinals
- Ground source heat via six one hundred meter boreholes in the Hub courtyard
- · Bio-fuel woodchip burner
- Vertical axis wind turbine.

The Course Handbook provides information and guidance on procedures, module information and points of contact for advice. Individual module handbooks provide a recommended reading list, which comprise both traditional text-based resources and a range of electronic multimedia resources that are accessed through the KLE. The MS Teams platform is also used to enhance student the student experience, providing learning resources and support during the period of engagement and providing a forum for the exchange of ideas and discussion of issues that arise.

Talks are given by guest speakers from industry and the public sector on a range of issues from policy and economics to technology challenges. This gives the students a commercial awareness that enhances their employability and gives them insight to help them make informed decisions on career development.

The Library has many resources relevant to the course, both on campus and online. Further information about the library can be found at: <a href="https://www.keele.ac.uk/library/">https://www.keele.ac.uk/library/</a>. Students obtain a username and password from the computer helpdesk in order to access online library services. Students are encouraged to build a research profile on sites such as <a href="https://www.researchgate.net">www.researchgate.net</a>, useful networking tools and sources of published peer-reviewed literature. Students have access to the IT Services at the University located in the library building. IT Services is responsible for the computing infrastructure in the university and for the support of all staff and students undertaking academic computing tasks. There is a large number of open access PCs available for students. All student PCs use a standard platform, which includes software such as Microsoft Office, web browsers, and other standard applications you may need. Printing facilities are available either in Schools or in the library building.

## 15. Other Learning Opportunities

Students are encouraged to take full advantage of the research seminar opportunities taking place in the School or across the University, including those offered on campus by the Institute of Liberal Arts and Sciences and by relevant professional associations. In addition, students are encouraged to work with external collaborators either on the Collaborative Project module and/or during their Dissertation project.

#### 16. Additional Costs

Field courses:

The School receives an annual financial contribution from the University to support the cost of the field course programme. There is a possible co-contribution cost charged to students for optional field courses for the MSc Environmental Sustainability and Green Technology programme of up to £100. The remaining costs are paid for by the University.

Travel:

Some travel costs may be incurred if an external project or collaboration is undertaken; any such costs will be discussed with the student before the project is confirmed. It will be possible for the student to select an internal project and that would not incur any additional travel costs.

#### Dissertation:

All students undertake a dissertation, which in some cases MAY include fieldwork. Students are responsible for organising their own transport and accommodation as well as paying any costs incurred whilst carrying out any Dissertation fieldwork. These costs are extremely variable as they are dependent on where the student carries out their project. For example, some projects will involve carrying out a field-based investigation on campus which will involve no costs.

#### Administrative:

As to be expected there will be additional costs for inter-library loans and potential overdue library fines, printing and graduation. We do not anticipate any further costs for this programme.

#### 17. Quality management and enhancement

The quality and standards of learning in this programme are subject to a continuous process of monitoring, review and enhancement.

- The School Education Committee is responsible for reviewing and monitoring quality management and enhancement procedures and activities across the School.
- Individual modules and the programme as a whole are reviewed and enhanced every year in the annual programme review which takes place at the end of the academic year.
- The programmes are run in accordance with the University's Quality Assurance procedures and are subject to periodic reviews under the Revalidation process.

Student evaluation of, and feedback on, the quality of learning on every module takes place every year using a variety of different methods:

- The results of student evaluations of all modules are reported to module leaders and reviewed by the Programme Committee as part of annual programme review.
- Findings related to the programme from the annual Postgraduate Taught Experience Survey (PTES), and from regular surveys of the student experience conducted by the University, are subjected to careful analysis and a planned response at programme and School level.
- Feedback received from representatives of students on the programme is considered and acted on at regular meetings of the Student Staff Voice Committee.

The University appoints senior members of academic staff from other universities to act as external examiners on all programmes. They are responsible for:

- Approving examination questions
- Confirming all module marks which contribute to a student's degree
- Reviewing and giving advice on the structure and content of the programme and assessment procedures

Information about current external examiner(s) can be found here: <a href="http://www.keele.ac.uk/ga/externalexaminers/currentexternalexaminers/">http://www.keele.ac.uk/ga/externalexaminers/currentexternalexaminers/</a>

## 18. The principles of programme design

The programme described in this document has been drawn up with reference to, and in accordance with the guidance set out in, the following documents:

- **a.** UK Quality Code for Higher Education, Quality Assurance Agency for Higher Education: <a href="http://www.gaa.ac.uk/quality-code">http://www.gaa.ac.uk/quality-code</a>
- **b.** Keele University Regulations and Guidance for Students and Staff: <a href="http://www.keele.ac.uk/regulations">http://www.keele.ac.uk/regulations</a>

In addition the course supports the University Strategic Objectives by engaging employers to ensure timely, commercially relevant content with a basis in practice and management. Students develop high level employability and research skills through Project Management and Business Skills and the Dissertation module. IT skills development is integrated into the course through the specific Green IT module and also the use of modelling software and online communication and presentation tools. This high level of IT competency, project management and professional working is developed during the teaching phases of the course then practiced in the dissertation phase when students work either independently on a given topic or in collaboration with external employers often on strategic plans related to energy and/or community project development.

## **Version History**

## This document

Date Approved: 30 August 2024

# What's Changed

Reinstated LAW-40043 (SEM1 optional module)

## **Previous documents**

Version No	Year	Owner	Date Approved	Summary of and rationale for changes
1.4	2023/24	DEIRDRE MCKAY	15 December 2023	Added GEG-40018 as option for students focussing on more social aspects of sustainability who are seeking qualitative methods training
1.3	2023/24	DEIRDRE MCKAY	25 August 2023	Changing ESC-40047 from Sem 2 to Sem 1. Added all the ENL modules and extra text on ENL offer.
1.2	2023/24	DEIRDRE MCKAY	17 July 2023	Change GEG-40030 Advanced Traineeship and ESC-40101 Collaborative Project and ENL-40001 so they run in BOTH Semesters as 15-credit optional modules.
1.1	2023/24	DEIRDRE MCKAY	19 May 2023	Due to the removal of an MSc programme in the School of Computer Science & Mathematics - remove ESC-40061 Smart Grid which will no longer run
1	2023/24	DEIRDRE MCKAY	08 March 2023	New version for 2023/24 supporting both September and January starts, sharing core research training modules with the MSc Geoscience Research for teaching efficiencies. Introduces a new *required* 60-credit module - Case Studies in Sustainability and Green Technology to ensure students engage core content of degree but have sufficient options for breadth.
1.1	2022/23	DEIRDRE MCKAY	22 August 2022	
1	2022/23	SHARON GEORGE	22 August 2022	