****

**Programme Specification**

**Title of Course: MSc Environmental Management**

 **MSc Environmental Management (Energy)**

**Date Specification Produced: January 2016**

**Date Specification Last Revised: September 2019**

This Programme Specification is designed for prospective students, current students, academic staff and potential employers. It provides a concise summary of the main features of the programme and the intended learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the teaching, learning and assessment methods, learning outcomes and content of each module can be found in Student Handbooks and Module Descriptors.

|  |  |
| --- | --- |
| **Title:** | MSc Environmental ManagementMSc Environmental Management (Energy) |
| **Awarding Institution:** | Kingston University  |
| **Teaching Institution:** | Kingston University  |
| **Location:** | Penrhyn Road |
| **Programme Accredited by:** |  |

1. **Programme Introduction**

Environmental Management is one of a new suite of postgraduate courses that addresses the future challenges associated with sustainably managing environmental systems. The course is distinctive in that it offers three of the most relevant sub-disciplines within sustainable environmental management: a core programme in environmental management and one pathway in Energy management. Students acquire pertinent research skills in each of these pathways. They study theoretical, practical and legal frameworks promoting sustainable environmental management and other drivers for sustainable behaviour at individual, institutional and governmental levels. They learn how to innovate, respond to new and emerging challenges and work effectively in changing and unfamiliar situations. The final award title will reflect students’ chosen pathway: *MSc Environmental Management* or *MSc Environmental Management (Energy)*. The energy pathway is timely, nationally and internationally relevant, given the world’s energy needs, as well as the surrounding political debates regarding fossil fuels and increasingly, renewables, which form such an essential component of the world’s existence.

The philosophy and rationale of the course build on the need for new environmental professionals: people with a strong cross-disciplinary understanding of the societal, economic, and environmental challenges posed by the emerging sustainable environmental management agenda. Identifying appropriate and effective responses, whether technical, regulatory, behavioural or fiscal or by innovative design or changing business priorities demands a high level of multi-disciplinary understanding. The *Environmental Management* Masters aims to provide students with the in-depth knowledge and the essential practical and evaluative skills needed to give leadership for low carbon, resource efficient, sustainable futures in diverse global contexts. The programme will provide students with a good basis for careers in local government, NGOs, major international companies, independent consultants, and in education, research and enterprise more generally.

Each of the pathways is offered with a Professional Placement option. This option is to spend an additional year in industry as part of the course. The placement year is for a 10 to 12 months period with 30-40 working hours per week. The placement must be in a company and the work must be relevant to the degree. The placement should be in the UK. The Placement has to be approved by the Faculty. The professional placement route is for full time students only.

Finding the placement is the responsibility of the individual students. If students do not find a suitable placement they will be switched onto the non-placement course.

1. **Aims of the Programme**

The specific aims for the MSc Environmental Management are:

* Equip students with detailed knowledge and understanding of the important relationships between environmental management and natural ecosystems and the value for adopting an integrated approach to studying both;
* Enhance students’ abilities to investigate the rationale behind the exploitation of natural environments and to demonstrate how they can be sustainably managed;
* Develop the conceptual and intellectual framework within which students can understand the breadth, application and contexts of environmental management;
* Enhance students’ ability to critically interrogate environmental data and design, conduct and report original research relevant to environmental management.
* Develop key skills in group work, independent research, report writing and oral presentation

In addition, aims for MSc Environmental Management (Energy) pathway are:

* To develop knowledge of the techniques relevant to a modern energy professional;
* To provide critical understanding of the factors that influence the economic value and various stages involved in development and exploitation within the discipline of Energy (e.g., conventional and non-conventional hydrocarbons, nuclear power, wind, wave, geothermal and tidal).

**In addition, the aims of the Professional Placement module are:**

* To provide experience of working in a professional environment that is relevant to the field of study;
* To allow students to consolidate and apply the range of skills and knowledge acquired in the course of their studies to a work environment and to reflect on and develop these skills and knowledge further;
* To enhance career prospects through the development of a range of skills that enable students to present themselves effectively, network and make informed decisions about employment and career plans;
* To develop the process of reflection and promote self-awareness in learning.
1. **Intended Learning Outcomes**

The programme outcomes are referenced to the Benchmark Statements for Earth Sciences, Environmental Sciences & Environmental Studies (ES3) and Geography and Framework for Higher Education Qualifications in England, Wales and Northern Ireland (2008), and relate to the typical student. The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills and other attributes in the following areas.

|  |
| --- |
| **Programme Learning Outcomes** |
|  | **Knowledge and Understanding****On completion of the course students will be able to:** |  | **Intellectual skills****On completion of the course students will be able to:** |  | **Subject Practical skills** **On completion of the course students will be able to:** |
| A1 | Identify and evaluate major environmental problems associated with the development and use of natural resources and be able to propose management solutions. *(Core pathway)* | B1 | Be able to design, manage and critical evaluate an independent research project and to communicate concisely, orally and in writing, the findings of their research. *(All pathways)* | C1 | Integrate research design and primary data collection and analysis methods from the core and energy pathways in environment and energy management. *(All pathways)* |
| A2 | Apply judgement, reflection and original thought to problem solving in a variety of contexts pertinent to sustainable environmental management and to develop policy and management responses to environmental change. *(Core pathway)*  | B2 | Demonstrate proficiency in the analysis, interpretation and presentation of primary research data and be able to critically synthesise incomplete or contradictory information. *(All pathways)* | C2 | Plan, design and execute a sustained piece of independent research and critically evaluate and interpret data in the context of contemporary research. *(All pathways)* |
| A3 | Show a critical understanding of the multidisciplinary challenges characteristic of environmental management in the context of managing threatened natural environments, scarce water resources and over-exploited energy systems. *(All pathways)*  | B3 | Critically analyse, validate and synthesise multidisciplinary information from disparate sources in a manner that is innovative and consistent with theories and practices from sustainable environmental management. *(Core pathway)*  | C3 | Analyse quantitative data with accuracy and precision and adapt approach and analytical techniques to new situations. *(All pathways)*. |
| A4 | Develop professional skills, values and competence in the reflective discussion of energy management and critically analyse concepts of sustainability as they apply to the management of energy systems. *(Energy Pathway)* | B4 | Have enhanced ability to evaluate primary research and advanced scholarship and apply their understanding to develop original and innovative approaches to sustainable practices in managing energy technology. (*Energy pathway)* | C4 | Identify and formulate research questions using advanced scientific practices and contemporary methods in energy management. (*Energy pathway)* |
| A5 | Demonstrate a critical understanding of how the operation of energy systems can be used for sustainable management and demonstrate an understanding of the impact energy has on the local and global environment. *(Energy Pathway)* | B5 | Reflect critically on their experience during the professional placement, including research and information literacy, numeracy, management and leadership skills. *(with Professional Placement Only)* | C5 | Develop and practise key personal and employability skills and show examples of the application of these skills *(With Professional Placement Only)* |
| A6 | Apply knowledge in a professional context, including understanding of their professional development and the structure of the placement organisation *(With Professional Placement Only)* |  |  |  |  |

|  |
| --- |
| **Key Skills** |
|  | **Self Awareness Skills** |  | **Communication Skills** |  | **Interpersonal Skills** |
| AK1 | Take responsibility for own learning and plan for and record own personal development | BK1 | Express ideas clearly and unambiguously in writing and orally | CK1 | Work well with others in a group or team |
| AK2 | Recognise own academic strengths and weaknesses, reflect on performance and progress and respond to feedback | BK2 | Present, challenge and defend ideas and results effectively orally and in writing | CK2 | Work flexibly and respond to change |
| AK3 | Organise self effectively, agreeing and setting realistic targets, accessing support where appropriate and managing time to achieve targets | BK3 | Actively listen and respond appropriately to ideas of others | CK3 | Discuss and debate with others and make concession to reach agreement |
| AK4 | Work effectively with limited supervision in unfamiliar contexts |  |  | CK4 | Give, accept and respond to constructive feedback |
|  |  |  |  | CK5 | Show sensitivity and respect for diverse values and beliefs |
|  | **Research and information Literacy Skills** |  | **Numeracy Skills** |  | **Management & Leadership Skills** |
| DK1 | Search for and select relevant sources of information | EK1 | Collect data from primary and secondary sources and use appropriate methods to manipulate and analyse data | FK1 | Determine the scope of a task (or project) |
| DK2 | Critically evaluate information and use it appropriately | EK2 | Present and record data in appropriate formats | FK2 | Identify resources needed to undertake the task (or project) and to schedule and manage the resources |
| DK3 | Apply the ethical and legal requirements in both the access and use of information | EK3 | Interpret and evaluate data to inform and justify arguments | FK3 | Evidence ability to successfully complete and evaluate a task (or project), revising the plan where necessary |
| DK4 | Accurately cite and reference information sources | EK4 | Be aware of issues of selection, accuracy and uncertainty in the collection and analysis of data | FK4 | Motivate and direct others to enable an effective contribution from all participants |
| DK5 | Use software and IT technology as appropriate |  |  |  |  |
|  | **Creativity and Problem Solving Skills** |  |  |  |  |
| GK1 | Apply scientific and other knowledge to analyse and evaluate information and data and to find solutions to problems |  |  |  |  |
| GK2 | Work with complex ideas and justify judgements made through effective use of evidence |  |  |  |  |

1. **Entry Requirements**

The minimum entry qualifications for the programme are:

A good honours degree (2.2 or better) or equivalent in a relevant discipline, such as Biology, Chemistry, Geography, Earth Sciences, Environmental Geography, Environmental Management, Environmental Sciences, Natural Resource Management, Sustainable Development, as the major field(s) of study or a relevant professional qualification, with suitable work experience.

Where applicants have relevant work experience and/or professional qualifications in the field of environmental management, energy management and sustainability or related fields may be presented for evaluation against Kingston University’s mechanisms and processes for Recognition of Prior Certificated Learning (RPCL) and Recognition of Prior Experiential Learning (RPEL).

International students for whom English is not the first language are required to have achieved an English language qualification prevailing currently at time of application or approved equivalent. Kingston University postgraduate English requirements can be found [at this link](http://www.kingston.ac.uk/international/studying-at-kingston/language-requirements/#postgraduate).

1. **Programme Structure**

The programme is structured to fit into a two block system, with each taught module worth 30 credits. The dissertation project module is taken over the summer, though preparatory work may be undertaken ahead of this time period. The full-time mode of the *MSc Environmental Management* and *Environmental Management (Energy)* normallytakes a full calendar year (12 months) study and the part time mode takes a minimum 24 months to complete.

**E1. Professional and Statutory Regulatory Bodies**

MSc Environmental Management and MSc Environmental Management (Energy) is accredited by the Institute for Environmental Management and Assessment (IEMA).

**E2. Work-based learning, including sandwich programmes**

The industrial placements team, aided by the Employability Co-ordinator, helps to prepare the students for interview and work, for example, with mock interview sessions, CV workshops, and industry speakers on employers’ needs. The optional professional placement for 1 year (10 to 12 months) is expected to take place between the formal taught modules and the final project.

Industry-hosted major projects are actively encouraged. It is the responsibility of individual students to source and secure such arrangements giving them more experience and employability skills after their Master’s degree

**E3. Outline Programme Structure**

The programme is made up of four modules each worth 30 credits and a research project module worth 60 credits. To achieve an MSc, students must complete 120 credits in the taught programme and complete the research dissertation. All students will be provided with the University regulations. Students choosing the Energy pathway are expected to do dissertation research projects specific to the chosen pathway. Full details of each module will be provided in module descriptors and student module guides.

|  |
| --- |
| **MSc Environmental Management (Core Pathway)** |
| **Compulsory Modules** | **Module Code** | **Credit Value** | **Level** | **Teaching Block** |
| Environmental Management | GG7045 | 30 | 7 | 1 & 2 |
| Water, Energy and Land Resources Management | GG7015 | 30 | 7 | 1 & 2 |
| Research Methods and Techniques1 | GG7050 | 30 | 7 | 1 & 2 |
| The Challenge of Climate Change | GG7070 | 30 | 7 | 1 & 2 |
| MSc Research Project | GG7900 | 60 | 7 | 1 & 2 |
| 1Distance learning element does not apply to this course or the other pathway. Geographical Information System (GIS) is provided in classroom setting.Students exiting the programme with 60 credits are eligible for the award of PgCertStudents exiting the programme with 120 credits are eligible for the award of PgDip |

|  |
| --- |
| **MSc Environmental Management (Energy)** |
| **Compulsory Modules** | **Module Code** | **Credit Value** | **Level** | **Teaching Block** |
| Environmental Management | GG7045 | 30 | 7 | 1 & 2 |
| Water, Energy and Land Resources Management | GG7015 | 30 | 7 | 1 & 2 |
| Research Methods and Techniques1 | GG7050 | 30 | 7 | 1 & 2 |
| Energy Management | GG7200 | 30 | 7 | 1 & 2 |
| MSc Research Project | GG7900 | 60 | 7 | 1 & 2 |
| 1Distance learning element does not apply to this course or the other pathway. Geographical Information System (GIS) is provided in classroom setting.Students exiting the programme with 60 credits are eligible for the award of PgCertStudents exiting the programme with 120 credits are eligible for the award of PgDip |

|  |
| --- |
| **Professional Placement****Students on the Professional Placement additionally take:** |
| **Compulsory Modules** | **Module Code** | **Credit Value** | **Level** | **Teaching Block** |
| Professional Placement | CI7900 | 120 | 7 |  |
|  |

1. **Principles of Teaching Learning and Assessment**

This course is designed to take advantage of the Kingston University Curriculum Design Principles. Modules are delivered using weekly lecture / practical sessions that run through two teaching blocks. The course utilises a wide range of teaching and learning methods that enable students to learn actively with all elements of the course and embed skills and knowledge within their own career aspirations. Teaching and learning methods are specifically designed to suit the content and the learning outcomes of each module. Typically, lectures are used to introduce key theoretical concepts and methodologies; practical sessions and field-based investigations introduce specific methods and exemplify theoretical concepts; independent learning space (e.g. guided by tutorials and seminar reflection) allows in-depth development and reading to support key concepts. Group work may be used to expose students to teamwork and working on larger projects.

Emphasis is placed on participatory learning though seminars, debate, role-playing, practical exercises, fieldwork[[1]](#footnote-1), module symposia, and tutorials and guided teamwork activities. Keynote lectures will introduce major topics that students are expected to develop further through guided reading and independent research. Expert guest speakers and environmental management practitioners will be invited to contribute to the taught programme to ensure relevance and currency in the world of research and professional practice. Tutorial support is offered through the course director and module leaders (see Personal Tutorial Scheme).

Appropriate use will be made of Kingston’s virtual learning facility as a repository for support materials and for exchange of information and ideas between module participants. Video and podcasts, self-assessment quizzes and dedicated reading materials will support the modules.

Research skills will be developed throughout the programme and explicitly in the research methods module GG7050 and in GG7900, the research project. Students are normally expected to scope, develop and manage their own research, with appropriate supervisory support. Research links with employer needs, Kingston University and neighbouring Local Authority projects are encouraged. The course team through research and consultancy activities has well-developed and long-standing links with local, and wider, contacts to help promote this activity.

The assessment during the Professional Placement year will include a reflective practice piece of work, a professional development portfolio (PDP) and the employer’s appraisal. The performance and attendance will be regularly monitored through the placement year. The marking of the placement is “pass” or “fail”.

1. **Support for Students and their Learning**

To help students achieve their learning outcomes, the Department of Geography and Geology within the School of Engineering and Environment has developed a wide range of initiatives to support postgraduates in both academic and pastoral matters. These include skills workshops that offer English language support, academic surgeries, detailed induction and orientation programmes at the start of the academic year, and subject based conference-style and team-building events. Advice on generic learning and study skills is available through the electronic learning management system to which all students have access: this includes, for example, advice on academic writing, oral communication, and numeracy, problem solving and career management.

Students are encouraged to discuss academic and pastoral concerns with their tutors. All academic staff operates a system of ‘office hours’ when they are routinely available for drop-in consultation or students may email for specific appointments. In addition, the Faculty of Science, Engineering and Computing (SEC) employs Student Support Officers who are available in both drop-in and appointment sessions to support students in all aspects of their education, including pastoral issues. Specific teaching and learning strategies are indicated in the individual module outlines.

**The Personal Tutor Scheme (PTS)**

Every student is assigned a Personal Tutor during Induction. This is a member of staff who is responsible for monitoring student’s progress throughout the course, assisting with academic development and pastoral care; the tutor provides study guidance and offers counselling should any academic or personal problems arise. Tutors are the main contact within the academic discipline beyond Module Leaders and the Course Director and students may liaise with them on an "as-needed" basis. Tutors assist students with queries in order to maximise their academic opportunities and direct them to other sources of academic guidance. Pastorally, Tutors are there to listen and offer guidance on the availability of support concerning, for example, finance and study. Students with specific needs will be accommodated and supported on a case-by-case basis. All effort will be made to be as inclusive as possible, particularly as this relates to engaging in practical work and fieldwork.

Students are supported by:

* A Module Leader for each module to provide logistical and academic support
* A Course Director to guide students through the programme structure and progression
* The Course Team to provide high quality teaching and advice
* Pastoral Tutors to provide personal support
* Technical support to advise students on IT and the use of software
* Experienced programme administration office for all non-academic queries
* An induction week at the beginning of the programme
* Staff Student Consultative Committee
* StudySpace – an on-line learning environment for *every* module
* A Learning Resource Centre and designated staff
* Study Skills Centre that provides academic skills support
* KU Student Support facilities that provide advice on financial, regulatory, legal, international student and accommodation issues
* A Faculty-based Student Support team that provides advice and guidance on disability issues, student complaints and mitigating circumstances
* Kingston Language Scheme’s (KLS) English language development programme provides free English classes to international students enrolled on the course
* The Union of Kingston’s Students
* Careers and Employability Service
* A Placement Tutor to give general advice on placements

Professional Placement Support

The students choosing the optional Professional Placement will receive additional support via an online database for local job opportunities, “JobShop” and from a dedicated careers team, which will offer CV and cover letter workshops, employers fairs and special events.

1. **Ensuring and Enhancing the Quality of the Course**

The University has several methods for evaluating and improving the quality and standards of its provision. These include:

* External Examiners
* Boards of study with student representation
* Annual review and development
* Periodic review undertaken at the subject level
* Student evaluation
* Moderation policies
* Professional advisory board established with IEMA
1. **Employability Statement**

The UK government and the international community have identified a priority need for graduates with advanced understanding of sustainable environmental management. The present course addresses this need and provides an interdisciplinary programme that develops the theoretical and practical training needed in the field of environmental management and energy management. Graduates are expected to find extensive career opportunities with NGOs, governmental organisations, businesses, industry and education or as independent consultants and advisers. They will be equipped for leadership roles.

Not only will the course enhance employability of entrants moving directly from first degree programmes, the *Environmental Management* and *Environmental Management (Energy)* programme will prove attractive to mid-career professionals seeking to upgrade their skills in this increasingly important area. It is anticipated that links with European and American Universities will further enhance career skills and opportunities. It is anticipated that most graduates from the programme will seek relevant professional employment but the course aims to equip graduates with the skill set to pursue higher qualifications or enter a research environment should they desire.

1. **Approved Variants from the UR / PR**

**None**

1. **Other sources of information that you may wish to consult**

Students may wish to consult a QAA benchmark statement for environmental management. Currently however, there is no direct QAA benchmark statement for Environmental Management and the two closest subject benchmarks are being revised. Therefore, students are encouraged to view the consultation drafts for these two subject benchmarks:

* **Geography**

<http://www.qaa.ac.uk/en/Publications/Documents/SBS-consultation-geography.pdf>

* **Earth Sciences, Environmental Sciences and Environmental Studies**

 <http://www.qaa.ac.uk/en/Publications/Documents/SBS-consultation-earth-sciences.pdf>

**Development of Programme Learning Outcomes in Modules**

This schematic identifies where the programme learning outcomes are assessed across the modules for this course.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  | **Level 7** |
|  | **Module Code (title)** |  | GG7050 | GG7070 | GG7900 | GG7045 | GG7015  | GG7200  | CI7900 |
| **Programme Learning Outcomes** | **Knowledge & Understanding** | A1 | S | FS | FS | FS | FS |  | F |
| A2 | FS | FS | F | FS | FS |  | F |
| A3 | F | FS | F | FS | FS | S | F |
| A4 |  | F |  | FS | F | FS | F |
| A5 |  | F |  | FS | F | FS | F |
| A6 |  |  |  |  |  |  | FS |
|  |  |  |  |  |  |  |  |
| **Intellectual Skills** | B1 | FS | FS | FS | FS | FS | S | F |
| B2 | FS | FS | FS | FS | FS | FS | F |
| B3 | FS | FS | FS | FS | FS | F | F |
| B4 | FS |  | FS | FS | FS | F | F |
| B5 |  |  |  |  |  |  | FS |
|  |  |  |  |  |  |  |  |  |
| **Practical Skills** | C1 |  |  | FS | FS | FS | FS | F |
| C2 | FS | F | FS | FS | FS | FS | F |
| C3 | FS | FS | FS | FS | FS | FS | F |
| C4 | FS | FS | S | FS | FS | S | F |
|  |  | C5 |  |  |  |  |  |  | FS |

**S** indicates where a summative assessment occurs.

**F** where formative assessment/feedback occurs.

**Technical Annex**

|  |  |
| --- | --- |
| **Final Award(s):** | *MSc, Environmental Management* *MSc Environmental Management (Energy)*  |
| **Intermediate Award(s):** |  |
| **Minimum period of registration:** | Full-time: 1 year\* Part-time: 2 years |
| **Maximum period of registration:** | Full-time: 2 years\* Part-time: 4 years |
| **FHEQ Level for the Final Award:** | Masters |
| **QAA Subject Benchmark:** | None |
| **Modes of Delivery:** | On-site |
| **Language of Delivery:** | English |
| **Faculty:** | Science, Engineering and Computing (SEC) |
| **School:** | Engineering and Environment |
| **JACS code:** | F800  |
| **UCAS Code:** |  |
| **Course Code:** |  |
| **Route Code:** |  |
|  |  |

\* The Professional Placement route adds an additional year

1. Fieldwork incurs an additional financial cost and details regarding fees for field trips are specified in module guides and on Course website. [↑](#footnote-ref-1)