Programme Specification for MRes in Ecology and Environmental Management

1.	Awarding institution/body	University of Worcester
2.	Teaching institution	University of Worcester
3.	Programme accredited by	N/A
4.	Final award	MRes
5.	Programme title	MRes in Ecology and Environmental Management
6.	Pathways available	N/A
7.	Mode and/or site of delivery	Taught and Research at the University of Worcester
8.	Mode of attendance	Full time and part time
9.	UCAS Code	N/A
10.	Subject Benchmark statement and/or professional body statement	The programme is informed by Vitae's Researcher Development Framework and the QAA's Masters Degree Characteristics.
11.	Date of Programme Specification preparation/ revision	July 2013, August 2014 and October 2014 (regulations). July 2016 regulations amended (Section 20), Section 21 updated, Section 14 amendment to MRes thesis July 2017.

12. Educational aims of the programme

Masters by Research programmes provide an opportunity for students to gain a qualification involving intensive research without the commitment of spending 3-4 years as in a PhD programme. The gaining of a Masters qualification is increasingly regarded as way of distinguishing a graduate from others who may hold a BSc (Hons) or BA (Hons). The Institute of Science and Environment's educational and research expertise within Ecology and Environmental Management encompass a range of topics, climate change and the degradation and loss of ecosystem services, grassland management and its botanical enhancement, habitat restoration, creation and maintenance, plant community ecology and vegetation dynamics, ecology and management of wild boar, ex-situ species conservation and management, soil and water analysis and management

The specific educational aims of the course are to enable postgraduate students to:

- Prepare for doctoral level study
- Engage in a career in ecological or environmental management in a research, consultancy or wider sector context
- Meet the national and international need for highly trained individuals who can make informed decisions on future research directions
- Think for themselves in the development of a critical approach to the analysis of data and interpretation of published research.

13. Intended learning outcomes and learning, teaching and assessment methods

Knowledge and understanding: By the end of the programme, students should be able to:	Examples of learning, teaching and assessment methods used:	
 Employ ecology and environmental management research techniques and procedures, including literature review, the collection, processing, analysis and 	These skills are developed through MENV4001, Research Methods in Ecology and Environmental Management, and the thesis	

- interpretation of data and the presentation and dissemination of results;
- 2. Reflect critically on the nature of ecology and environmental management research;
- Develop and acquire knowledge of current research in Ecology and Environmental Management;

preparation module MENV4002. They are then utilised in MENV 4005, the MRes Thesis.

Cognitive and intellectual skills:

By the end of the programme, students should be able to:

- 1. Integrate and evaluate information and data from a variety of sources;
- 2. Creatively seek solutions to Ecological and Environmental Management problems;
- 3. Plan, conduct and report on a programme of original research;
- 4. Extrapolate theories from complete and incomplete data sets;

Examples of learning, teaching and assessment methods used:

Intellectual skills are developed through the teaching and learning programme outlined above.

Assessment of thinking skills is achieved through coursework, the individual research project, and practical assignments.

Practical skills relevant to employment:

By the end of the programme, students should be able to:

- Develop further skills and critical knowledge of data recording techniques relevant for ecology and/or environmental management investigations;
- 2. Use and critically evaluate ecological and/ or environmental management techniques;
- 3. Critically evaluate and present ecological and/or environmental management data:

Examples of learning, teaching and assessment methods used:

These skills are developed through MENV4001, Research Methods in Ecology and Environmental Management. Further specific skills will be developed during the MENV4002, module, as appropriate.

Final assessment of these skills will be achieved during the MRes Thesis, as appropriate.

Transferable/key skills:

By the end of the programme, students should be able to:

- Communicate effectively using appropriate communication methods such as oral presentations and written reports to deliver scientific results to specialist and nonspecialist audiences;
- Apply experience in program design and project management to proposing conducting and writing up research in a variety of forms, including work-based interpretative reports and/or an extended dissertation:
- 3. Exercise initiative, take personal responsibility and practice self-direction;
- 4. Learn effectively for the purpose of continuing professional development;

Examples of learning, teaching and assessment methods used:

These skills will be developed during the modules MENV4001, MENV4002 and MENV4005.

Presentations may be given as a part of the ISE research seminar series.

- Comply with existing, and design new and appropriate risk assessments and health and safety procedures;
- 6. Time management.

14. Assessment Strategy

The Assessment strategy has been designed to provide students with a variety of challenges appropriate for Master's level modules. The range of assessments specified in the module outlines have been developed in order to support the pedagogical and research approaches employed and which are appropriate for the nature of the subject disciplines covered.

In line with the University of Worcester Assessment Policy, assessments for the individual modules have been designed to enable students to demonstrate that they have successfully met the learning outcomes. These are specified in each assignment brief along with any assessment criteria. Students are also supported through the use of the <u>University of Worcester grade descriptors</u>. These are customised in each module and provided in the module outlines.

The assessment strategy is designed to provide students with the knowledge and skills that are required to work in Ecology and Environmental Management.

Taught Modules

The course will incorporate a range of assessment items - the mapping of assessment strategies to individual modules is included in the course handbook. Broadly speaking, the course structure of 3 20-credit modules plus a 120-credit Thesis provides a sound background in Ecology and Environmental Management. Research skills will be developed through the taught modules from generic research skills in RTP401, to more specific Ecology and/or Environmental Management research skills in MENV4001 to very specific preparation for the MRes thesis in MENV4002.

During module RTP401 the student will prepare their research proposal for the thesis. This proposal will form the assessment for the module along with a short presentation on research. MENV4001 is assessed by the a report critically evaluating research methods, a research proposal and the production of a laboratory notebook/field notes, which prepare the student for recording work effectively during the thesis. MENV4002 Research Thesis Preparation is assessed by means of an initial PDP assessment and action plan to address any specific issues required before moving onto the thesis, a completed action plan giving evidence how specific issues have been addressed and a 30 minute presentation on the intended project which will include scheduling and information on intended methods.

MENV4005 Thesis

The MENV4005 Thesis module has a substantial research component (120 credits) assessed by means of a significant piece of writing in the form of a Thesis. This enables the student to demonstrate initiative and creativity in formulating and carrying out a research project. In order to progress from the taught element of the programme to the thesis stage the student must pass all three taught modules (see below). The thesis is designed to give practical experience of laboratory-based research and provide the opportunity to develop a wide range of skills.

The thesis will be submitted to an examination team comprising two internal examiners.

15. Programme structures and requirements

Award Map

The Programme consists of:

- 60 credits at Level 7 (PG Cert Research Methods in Ecology and Environmental Management) plus
- 120 credit thesis at Level 7 (MRes Thesis)

A student can only progress to the MRes Thesis if the taught modules for the PG Cert have been passed.

Taught modules at Level 7

Module code	Module title	Credit value
RTP401	Processes and Skills, Management and Methods	20
MENV4001	Research Methods in Ecology and Environmental Management	20
MENV4002	Research Thesis Preparation	20
MENV4005	MRes Thesis	120

16. QAA and Professional Academic Standards and Quality

The programme has been designed with reference to the <u>QAA Guidance on Masters</u> Degree Characteristics as well as the <u>Vitae Researcher Development Framework</u>.

In addition, standards promoted by the <u>Chartered Institute of Ecology and Environmental Management</u> were considered when designing this programme and are implicitly incorporated into the MRes in Ecology and Environmental Management.

17. Support for students

The following activities and documents have been put in place to provide support for Masters students at the Institute of Science and the Environment:

- An Induction programme
- Course handbook and modules outlines
- Day to day support through the Research School
- An introduction to the process of Personal Development Planning (PDP)
- Training opportunities for career planning through the Research School and the Careers Service
- Support from ILS staff during induction and through Information Desk and Study Guides
- Representation on Programme Committee to address course-wide issues
- Each student is allocated an academic tutor to provide support for learning.
- Registry provides student-specific information, including module results, on the SOLE page of the University website
- A range of support services including accommodation office through Student Services
- English language support provision (where necessary, as in case of International students)

- The Disability and Dyslexia service offer a range of support and advice for students with particular needs.
- Access to Laboratory accommodation within ISE and/or NPARU
- Access to field or laboratory via ISE
- Technical laboratory support within ISE/NPARU

In addition to the above, on acceptance, students are assigned a supervisor (Director of Studies) for the thesis stage of the programme, who has expertise in their specialist area of Ecology and/or Environmental Management. The supervisor provides advice and undertakes regular progress reviews during the thesis stage of the programme. Written records are normally kept for all meetings.

18. Admissions

Admissions Policy

The University aims to be accessible; it is committed to widening participation and encouraging diversity in the student population. The Institute of Science and the Environment works closely with central student support services, including the Research School, the Disability and Dyslexia Service and the International Office, to support students from a variety of backgrounds. We actively encourage and welcome people from the widest range of economic and cultural backgrounds.

Admission to the course is in Semester 1 only of the academic year.

Entry requirements

Applicants are normally expected to:

(a) Have a First or Second Class Honours Degree or equivalent award in an appropriate discipline

or

(b) Have appropriate research or professional experience which has resulted in appropriate evidence of achievement. For example experience in a research environment such as private consultancy firm, heritage organisation or public history and archaeology service.

International applicants will also be required to demonstrate that they have the appropriate level of written and spoken English (normally IELTS score of 6.5 with a minimum score of 6 in written English). Entry qualifications for international students are guided by the National Academic Recognition Information Centre's (NARIC) advice on international qualifications.

Recognition of Prior Learning

Students with relevant previous study at postgraduate level or with extensive experience may be considered eligible for recognition of prior learning. Please contact the Research School for further information or guidance on 01905 855214.

Further information on Recognition of Prior Learning can be found at http://www.worcester.ac.uk/registryservices/941.htm

Admissions procedures

All applications are submitted to the Research School and passed to the relevant Programme Leader for consideration. In the application form applicants are required to outline a research proposal for their intended thesis. If the application has potential, an interview is scheduled by a panel comprising at least two members of academic staff. Completion of an interview

checklist allows for a thorough rigorous evaluation of the candidate's strengths at interview. It also means that details about the offer conditions are passed back to the Research School, enabling a comprehensive offer letter and contract to be produced.

Applications from those with international qualifications are checked by the Research School Manager against NARIC and copies of all certificates are required before an unconditional offer is made to the student. All international applicants are checked for their competency in English language by the Language Unit. When it is felt that the applicant does not possess the appropriate level of English language, an in house English language course may be recommended before the student embarks on their RDP. Information about all offers made to international students is passed back to the relevant personnel in Student Services who can provide the student with additional support and guidance (for example, to obtain a visa, accommodation etc).

The selection and admission processes outlined above ensure that only appropriately qualified students are admitted to an MRes and that the student can be satisfactorily supported in their research.

Admissions/selection criteria

An offer of a place on an MRes in Ecology and Environmental Management will be made when the following conditions are satisfied:

- Applicant meets the specified entry requirements.
- The Institute has the supervisory capacity and expertise to support the research project outlined in the application form
- The proposal outlined has the potential to become a viable research project at Masters level.

19. Methods for evaluating and improving the quality and standards of teaching and learning

Mechanisms for review and evaluation of teaching, learning, assessment, the curriculum and outcome standards, include:

- Module feedback
- Annual Course Evaluation Report completed by course manager
- Periodic review including external scrutiny
- External examiners reports
- Academic staff annual appraisal

Committees with responsibility for monitoring and evaluating quality and standards:

- Institute of Science and the Environment Quality Committee
- Environmental Sciences Course Team
- Academic Standards and Quality Enhancement Committee (ASQEC)
- Ethics Committee
- Learning and Teaching Committee

Mechanisms for gaining student feedback on the quality of teaching and their learning experience

- Module feedback questionnaires
- Student representative participation in Environmental Science Course Management

committees

Meetings with academic tutor/supervisor(s)

20. Regulation of assessment

The course operates under the University's <u>Taught Courses Regulatory</u> Framework

Requirements to pass modules

- Modules are assessed using a variety of assessment activities which are detailed in the module specifications.
- The minimum pass mark is D- for each module.
- Students are required to submit all items of assessment in order to pass a module, and in some modules, a pass mark in each item of assessment may be required.
- Full details of the assessment requirements for a module, including the assessment criteria, are published in the module outline.
- Students are required to pass the three taught modules (RTP401, MENV4001 and MENV4002) in order to progress to the thesis stage of the programme (MENV4005).

Submission of assessment items

- Students who submit course work late but within 5 days of the due date will have work marked, but the grade will be capped at D- unless an application for mitigating circumstances is accepted.
- Students who submit work later than 5 days but within 14 days of the due date will not have work marked unless they have submitted a valid claim of mitigating circumstances.
- For full details of submission regulations please see the Taught Courses Regulatory Framework.

Retrieval of failure

- Students are entitled to resit failed assessment items for any module that is awarded a fail grade, unless the failure was due to non-attendance.
- Reassessment items that are passed are graded at D-.
- If a student is unsuccessful in the reassessment, they have the right to retake the module (or, in some circumstances, take an alternative module); the module grade for a re-taken module is capped at D-.
- A student who fails 60 credits or more after exhausting all reassessment opportunities may be required to withdraw from the University.

Requirements for Awards

Award	Requirement
PG Cert Research	Passed a minimum of 60 credits at level 7, as specified
Methods in Ecology	on the award map
and Environmental	
Management	
Masters (MRes) in	Passed a minimum of 180 credits at level 7 including 120
Ecology and	credits for the Research Project module, as specified on
Environmental	the award map
Management	

PG Cert is unclassified. The award of Masters (MRes) may be made with Pass, Merit or Distinction.

21. Indicators of quality and standards

Postgraduate research in Ecology and Environmental Management is highly important in ISE. Publications from members of staff in the University are made available via a research repository called WRAP (Worcester Research and Publications). ISE has a significant proportion of these publications. In addition, staff contribute regularly to research symposia and conferences, nationally and internationally.

22. Employability and graduate destinations

Generally, MRes Graduates will pursue a career either in academia or industry. The knowledge and training students receive will provide a springboard for vocational careers in ecology or environmental management within the countryside sector (e.g. wildlife trusts, land management), consultancies, the environmental industry (e.g. water and waste management), governmental, and industrial research and education as well as by going on to PhD study in academia. Emphasis on high level academic attainment and the development of transferable skills will generate job opportunities in aspects of natural sciences and other areas of employment.

As well as being a qualification in its own right, an MRes qualification in Ecology and Environmental Management is an important pathway into Doctoral study in the Environmental Sciences. Students with this qualification will be better placed to progress to successful doctoral study at the University of Worcester or elsewhere.

Please note: This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in the module outlines and the course handbook provided to all students at the start of the course. The accuracy of the information contained in this document is reviewed by the University and may be checked by the Quality Assurance Agency for Higher Education.