Programme Specification for MRes River Science

This document applies to Academic Year 2018/19

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 River Science
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**	N/A
11.	**Date of Programme Specification preparation/ revision**	March 2014, August and October 2014 (regulations and admissions section amended) September 2016 regulations amended (Section 20), Section 21 updated, Section 14 amendment to MRes thesis July 2017, August 2017 - AQU amendments, August 2018 – AQU amendments.

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 on a PhD programme. The gaining of a Masters qualification is increasingly regarded as way of distinguishing a graduate from others who may hold a BA or BSc. The Institute of Science and Environment's (ISE) teaching and research expertise within River Science spans the interface of fluvial geomorphology, hydrology and ecology and includes the application of field monitoring, GIS and remote sensing.

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

- Prepare for doctoral level study
- Engage in a career in River Science within a government agency (e.g. Environment Agency), charity (e.g. Rivers Trust or Wildlife Trust) or consultancy.
- Meet the global 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: On successful completion of the programme, students will be able to:	***Examples of learning, teaching and assessment methods used:***
1. Employ River Science research techniques and procedures, including the collection,	

processing, analysis and interpretation of River Science data. 2. Reflect critically on the nature of River Science research. 3. Develop and acquire knowledge of current research in River Science.	These skills are developed through MRSC4001, Research Methods in River Science, and the thesis preparation module MRSC4002. They are then utilised in MRSC4005, the MRes Thesis.
Cognitive and intellectual skills: On successful completion of the programme, students will be able to: 4. Reflect on the development of, and current concepts and theories in, River Science.	***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: On successful completion of the programme, students will be able to: 5. Develop further skills and critical knowledge of data recording techniques relevant for River Science investigation. 6. Use and critically evaluate River Science data collection and analysis techniques such as hydrological monitoring, physical and hydraulic habitat assessment, sampling of aquatic communities. 7. Develop skills in preparing and presenting River Science data.	***Examples of learning, teaching and assessment methods used:*** These skills will be developed during the MRSC4001 Research Methods in River Science Module, assessed through a poster presentation. Further specific skills will be developed during the MRSC4002 module as appropriate. Final assessment of these skills will be achieved during the MRSC4005 Thesis.
Transferable/key skills: On successful completion of the programme, students will be able to: 8. Develop further skills in problem based learning in research design and project management of River Science research. 9. Apply experience in research design and project management to proposing conducting and writing up River Science research in a variety of forms, including oral presentation and a Thesis.	***Examples of learning, teaching and assessment methods used:*** These skills will be developed during the generic research methods module RTP401 Processes and Skills, Management and Methods, and in the more subject specific MRSC4001 Research Methods in River Science module and MRSC4002 Research Thesis Preparation Module, in particular, during the completion of the pilot study (MRSC4001) and critique of the data collection (MRSC4002).

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 University of Worcester grade descriptors. 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 carry out research and gain employment in River Science.

Taught Modules

The course will incorporate a range of assessment items - the mapping of assessment strategies to individual modules is included later in this course handbook. Broadly speaking, the course structure of 3 x 20-credit modules plus a 120-credit Thesis provides a sound background in River Science. Research skills will be developed through the taught modules, from generic research skills in RTP 401, to more specific River Science research skills in MRSC4001 and to very specific skills preparation for the MRes thesis in MRSC4002.

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. MRSC4002 is assessed by an essay that evaluates student understanding of the development of River Science as an interdisciplinary science, and also via the collection, analysis and presentation of a mini research project in the form of a poster which prepares the student for recording work effectively during the thesis. MRSC4002 Research Thesis Preparation is assessed by means of an initial PDP assessment and a critique of a data collection and/or analysis technique that will be employed in the main research project.

MRSC4005 Thesis

The MRSC4005 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 River Science) plus
- 120 credit thesis at Level 7 (MRes in River Science)

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	Developing and Managing your Research	20
MRSC4001	Research Methods in River Science	20
MRSC4002	Research Thesis Preparation	20
MRSC4005	MRes Thesis	120

16. QAA and Professional Academic Standards and Quality

In absence of a QAA benchmarking statement for taught masters provision in River Science, qualifications are based on the generic descriptors published in ***The framework for higher education qualifications in England, Wales and Northern Ireland*** **(FHEQ)** Masters (level 7) provision, as well as in the Section A of the UK Quality Code for Higher Education and the QAA Guidance on Masters Degree Courses. This award is located at level 7 of the FHEQ.

17. Support for students

The following activities and documents have been put in place to provide support for Masters students in ISE:

- Induction programme including inputs from Student Services
- Course Handbook and modules outlines
- Support from Library Services staff during induction and through Information Desk and Study Guides
- Representation on Course Management 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 (Firstpoint)
- 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.

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 River Science. 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 student services, including the Research School and the Disability and Dyslexia Service (part of student services 'Firstpoint'), to support students

from a variety of backgrounds. We actively encourage and welcome people from the widest range of economic and cultural backgrounds.

See Admissions Policy for further details.

Entry requirements
Applicants are normally expected to:

(a) Have a First or Second Class Honours (2:1) Degree or equivalent award in Geography, Environmental Science, Ecology, Biology, a Science subject or another relevant degree, *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, government organisation or charitable trust.

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
We envisage that students will normally discuss their potential research project with relevant staff prior to submitting an application. This will ensure both parties are happy that in principle staff have the expertise necessary to supervise the proposal. They can also identify at an early stage if the proposed research project requires additional resources that are not already available and would not normally be provided for students on the MRes course. This will be discussed with potential applicants when an expression of interest is made, *i.e.,* prior to a course application being submitted. Where there is a significant additional cost to provide resources that are not already available and would not normally be provided by the University (e.g. technical equipment, consumables for water quality testing in the laboratory), the cost of this provision will be agreed with the student prior to course registration and may be added to the tuition fees as a 'bench fee'. This amount will also need to be agreed with the Head of ISE prior to course registration. Additional costs of external training can also be identified at this stage.

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 Centre. 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 River Science 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
- Feedback from workplace mentors (where applicable)

Committees with responsibility for monitoring and evaluating quality and standards:

- Institute of Science and the Environment (ISE) Quality Committee
- River Science Course Team
- Academic Standards and Quality Enhancement Committee (ASQEC)
- Ethics Committee
- Learning, Teaching and Student Experience Committee

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

- Module feedback questionnaires
- Student representative participation in River Science Course Management Committees
- Meetings with Academic Tutor
- Meetings with work placement mentors, if necessary.

20. Regulation of assessment

The course operates under the University's Taught Courses Regulatory 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, MRSC4001 and MRSC4002) in order to progress to the thesis stage of the programme (MRSC4005).

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.

Retrieval of failure

- Students are entitled to resit failed assessment items for any module that is awarded a fail grade.
- Reassessment items that are passed are capped 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.
- A student will be notified of the reassessment opportunities in the results notification issued via the secure student portal (SOLE). It is the student's responsibility to be aware of and comply with any reassessments.

Requirements for Awards

Award	Requirement
PG Cert Research Methods in River Science	Passed a minimum of 60 credits at level 7, as specified on the award map
MRes in River Science	Passed a minimum of 180 credits at level 7 including 120 credits for the Research Project module, as specified on the award map

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 River Science is very 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.

22. Graduate destinations, employability and links with employers

Graduate destinations

- The MRes in River Science will provide students with training and competitive edge within the river conservation and management sector of national agencies, charitable trusts and private consultancy sectors.
- The MRes in River Science will also provide a stepping stone to further post-graduate research, i.e. Doctorate programmes.

Student employability

- The River Science programme at the University of Worcester combines a theoretical focus with a core of technical competencies, providing students with the opportunity to develop as effective, reflective professionals. Successful students of the MRes in River Science should be able to not only conduct competent research, but will also have developed skills in project management commensurate with independent research and in managing large research projects.

Links with employers

- The staff team have developed links with a range of employers, both locally and nationally. For example, former students have gained employment with local companies and organisations including Hydro-Logic (Bromyard), RS Hydro (Bromsgrove), Environmental (Worcester), Worcestershire County Council, Worcestershire Wildlife Trust, and with larger companies and government bodies such as the Environment Agency, Natural England, WS Atkins and various regional water companies (e.g. Thames Water).

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 associated course documentation e.g. course handbooks, module outlines and module specifications,