

Nottingham Trent University Course Specification

Basic Course Information	
1. Awarding Institution:	Nottingham Trent University
2. School/Campus:	Science and Technology/Clifton
3. Final Award, Course Title and Modes of Study:	MSc by Research Environmental Management FT, PT & SW
4. Normal Duration:	1 year FT; 2 years PT; 2 years SW
5. UCAS Code:	BIOL (see above)

6. Overview and general educational aims of the course

The MSc by Research Environmental Management provides you with a strong focus on research, with 100 credit points (cp) directly associated with research and research skills. The broad aims of the course are:

- to provide an intellectually challenging and professionally relevant education in the scientific concepts of environmental management at Master's degree level;
- to explore and elucidate the approaches required to undertake effective post-graduate research in environmental management;
- to provide training in techniques and research methods as currently applied in environmental management;
- to give you the opportunity to undertake original literature- and practical-based research projects leading to the generation of potentially publishable findings;
- to enhance your ability to manage your own intellectual development, building on your own prior knowledge and experience throughout the course.

7. **Course outcomes**
Course outcomes describe what you should know and be able to do by the end of your course if you take advantage of the opportunities for learning that we provide.

Knowledge and understanding

By the end of the course you should be able to:

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| CLO1 | discuss critically and communicate clearly the ideas and concepts inherent in environmental management; |
| CLO2 | appreciate the requirements necessary for the presentation and publication of scientific data; |
| CLO3 | identify current issues in environmental management and demonstrate a critical understanding of research methods required for proposing, planning, and carrying out effective PG-level research into these. |

Skills, qualities and attributes

By the end of the course you should be able to:

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| CLO4 | apply appropriate scientific methods and reasoning to the analysis of complex problems in environmental management; |
| CLO5 | evaluate, critically appraise and use information and approaches in environmental management; |
| CLO6 | plan, undertake and communicate the findings of an independent, practical or data-based project in environmental management; |
| CLO7 | work constructively and cooperatively as an individual and as a team member, exercising a range of interpersonal skills. |

1. Teaching and Learning Methods

Some modules are delivered by distance learning, which allows you to work at a time and at a pace that suits you. You will use a state-of-the-art e-learning system which has been proven to be highly effective and easy-to-use. This is provided by Loreus Ltd, a university spin-out company.

The benefits of the distance-learning system are that it:

- provides the latest relevant knowledge from academic and professional experts,
- provides flexible training at the workplace;
- saves time and money compared with traditional learning methods;
- is easy to use and is available 24/7;
- gives fast access to relevant information and references in a logical manner;
- has hot-spots and hyper-text links to information on the web;
- is ideal for both passive and active learners;
- enables you to work at your own pace and in your own way;
- provides self-assessment and instant feedback.

Each module contains case studies for you to work through to help you to understand the theory. There are also quizzes so that you can test your understanding of the concepts involved.

It is important that you feel part of a coherent group and that you meet others on the course as well as your academic and commercial tutors. This is one of the reasons why the Practical Resource Management module will be delivered as a seven-day intensive residential course. Here you will have an opportunity to learn from leading academics and practicing professional consultants.

Other modules are delivered on campus during lectures, seminars and other interactive teaching experiences, supported by guided reading and online resources, including those provided on NOW (NTU Online Workspace), our Virtual Learning Environment. You will also have one-to-one or small group tutorials with your own tutor.

You will be given extensive guidance and practice in written and oral presentation skills with appropriate feedback. You will also get extensive guidance and practice in the design, execution and reporting of research investigations, and this will be put into practice in the project.

We enhance the delivery of the course by the direct involvement in course design and delivery of research active staff and professional environmental managers in the teaching team.

During the course of your studies, you will assemble a Skills Portfolio, which you can use to reflect on the skills and attributes which you acquire. This Portfolio will provide evidence when completing your CV, and when applying for jobs at the end of the course.

2. Assessment Methods

In the taught part of the course, you will be assessed by a wide variety of different types of coursework. The Research Project module will involve the design, implementation and reporting of a major research task. You will communicate your findings at the end of the project as a project thesis and you will present your findings as a poster. You will receive advice and training on data analysis and presentation skills in the induction week and in the Research Methods and Bioethics module.

You will be assessed in each module in a manner consistent with the aims, objectives and learning outcomes stated in module specifications. Assessed work will take some of the following forms:

Research Project thesis

This thesis assesses your ability to design and implement a course of research, and communicate the findings to an informed audience in a comprehensive thesis, written in an appropriate scientific style.

Dissertation

An extensive review of the literature in a pathway specific subject area presented as a review article as though for publication in a peer reviewed journal.

Oral presentation

This assesses your oral communication skills. You will be assessed on your ability to communicate cogently using appropriate visual aids. You will also be assessed on your ability to answer questions with knowledge and authority.

Poster presentation

This is a written poster display of the findings of your research project or of a specific taught module task. It tests your ability to synthesize arguments and present them in a highly condensed, accessible and pictorial form. You will need to defend the work verbally to members of the Course Team.

Field files and formal reports

These are either short (field file) or a long (formal report) reports detailing data collected during practical work including field work. Formal reports in particular require extensive data analysis and interpretation, using previous research to support arguments.

Skills portfolio

The skills portfolio allows students to collate practical and transferable skills acquired over the course of the Master's degree in a format suitable for sharing with a future employer. Evidence of skills will be presented within the portfolio along with some reflection on progression and development throughout the course.

Research proposal

The research proposal details an overview of a proposed future project. The proposal includes a detailed background to the subject matter, aims, main approaches and experimental design with associated time plan and expected outcomes and contribution to the field of research.

Statistical analysis

This assessment involves exercises in the statistical analysis of scientific data. Students are asked to select, perform, present and comment on appropriate statistical tests linked to raw scientific data using appropriate statistical packages.

Reflective journal

This assessment takes the form of a diary of progress through a module and includes your thoughts and experiences as your study develops. The reflective journal is used to reflect on what you learned from different sessions and how this knowledge has helped to shape your development.

Business case assignment

Choose an interesting publicly-quoted (stock market listed) company and firstly investigate the company history, including the share price, over the last 5 years. The share price rises when the company is successful (new products, improving productivity (especially in R&D), improving sales, decreasing costs, new markets etc.) and falls when the company is unsuccessful (poor performance in the same areas, quality scares, legal battles, etc.). Please use the company website, annual reports, press releases, and other general sources of information (financial papers, magazines, reviews etc.) to explain why the company's share price shows "peaks & troughs" during the period.

Business plan assignment

A Business Plan will be prepared according to the tuition provided in the lecture programme and specific instruction in the final lecture period. The students will be requested to create a Business Plan for a business of their own choice, location and currency and they must prepare a document to support the proposal using all aspects of the teaching and applied in the correct way.

Case studies

These are practical exercises to test your ability to apply your theoretical knowledge and skills in a given area. You will have to deal with complex issues in a systematic and creative way and show originality in solving problems posed in the case studies.

Computer tests

There are open-book tests at the end of each section of the e-learning system used in modules delivered by distance learning. They will help you to test your understanding of key concepts. Feedback is given after each question, to help you to improve.

3. Course structure and curriculum

The MSc by Research course is a one year full time, two year part time or two year sandwich placement** course. The duration of the academic year comprises 30 weeks divided into 3 terms with a number of modules delivered in term 1 and others in term 2, however the research project practical work continues usually until the end of July, with submission of the thesis in early September and presentation of the research by poster in late September. The full year consists of 180 credits of modules. All your modules are 20 credits, except for the 60 credit Research Project.

Contact hours for a 20 cp modules are typically around 50 hours, with a further 150 hours expected from you for directed and independent study.

You will be given a choice of research topics or may approach staff with ideas of your own. The topic of the research is agreed with individual academic staff supervisors, and is exploited for assessments linked to the *Research Methods & Bioethics* module, enabling you to have carried out background reading *etc.* in advance of the start of the project. You will also develop further your research skills by taking the module Scientific Analysis, Review and Presentation in which you explore the subject area more widely, producing a dissertation in the form of a review article.

You may choose to study 60 cp of taught modules for a PGCert in MSc by Research Environmental Management, or take 120 cp of taught modules for the award of PGDip. If you are unsuccessful in completing the 180 cp required for MSc, you will be awarded PGCert if you have passed at least 60 cp, or PGDip if you have passed 120 cp.

A number of modules are shared by other MSc courses however the clear distinctiveness of the degree lies in the combination of these modules and the chosen research project. A summary of the MSc by Research Environmental Management course structure is given below along with details of the core modules.

Module title
<p>Advanced Environmental Management 20 cp e-learning</p> <p>This module provides the background required to understand the earth's natural systems and resources and how they can be managed. It also gives the legal framework for protecting the environment and managing environmental improvement.</p>
<p>Environmental Management Systems (ISO14001) 20 cp e-learning</p> <p>This module gives the theoretical skills needed to develop, implement and operate an environmental management system (EMS) conforming to the international EMS standard ISO 14001.</p>
<p>Practical Resource Management 20 cp residential field course</p> <p>Here the theoretical knowledge and skills gained in the previous two modules are applied to real-life situations.</p>
<p>Research Methods and Bioethics 20 cp</p> <p>Development of skills in the use of software packages for statistical analysis of data; how to plan, write and deliver oral presentations, posters and research proposals. The Masters Skills portfolio will be assessed as part of this module.</p>
<p>Business and Enterprise 20 cp</p> <p>The aims of this module are:</p> <ul style="list-style-type: none"> • To explain the structure of the Bioscience industry • To explain concepts of entrepreneurship & the innovation process • To explain the value of Intellectual Property • To describe the factors influencing the start-up of a business • To explain the commercial approach to New Product Development • To develop an appreciation of customers, markets and marketing

- To explain the importance of team working and Human Resource Management
- To understand the critical role of finance in business
- To develop the ability to create a business plan

This module will encourage students to approach ideas generation in a creative manner and understand the role and nature of new business concepts and their development.

Scientific Analysis, Review and Presentation 20 cp

The aims of this module are to enable you to gain the relevant skills required of high quality academic reporting of scientific research. Through a series of seminar sessions, you will learn from staff and through peer discussions, how to research, analyse and report on scientific findings related to your degree title.

Research Project 60 cp

A full-time research project in an area that fits with the chosen pathway.

If you opt to take the Sandwich Placement** after the research project you would be expected to complete a shorter project report by the end of August and then on completion of the placement a further Industrial Placement report, both of which contribute to the Research Project module assessment.

**The sandwich placement is optional and subject to availability. It is anticipated that the sandwich placement will be for one full year, starting after completion of the research project, with your return to NTU once the placement has finished you are expected to complete the final piece of assessment which contributes to the Research Project module. For October starters the course will end here and for January starters you will then re-enrol to complete the final set of modules and complete the course in the January.

4. **Admission to the course**

For admission to this course you will possess one of the following:

- an Honour's degree in a relevant subject (e.g. biological, earth or natural sciences, geography, law, or business studies) from a United Kingdom or equivalent University, the minimum degree category for entry to the course will normally be at least a 2ii, or its equivalent;
- Overseas applications will be based on the NARIC equivalent of the above (see below).
- a professional qualification of equivalent status;
- any other qualification and experience as the Admissions Panel shall deem equivalent in subject content and level of attainment.

Additionally, overseas students will normally be expected to have a level of English language capability demonstrated by attainment of IELTS to grade 6.5, or equivalent. Equivalent experience may include the successful completion of a non-UK degree in the English language or a significant period of residence/work placement in an English speaking country, for which evidence should be provided. This requirement is made clear to the students in the course literature before they apply for the course. Students who marginally fail to reach the above criteria are expected to attend a pre-term English language course for overseas students, organised by Nottingham Trent University. Those who wish to continue improving their proficiency in English are encouraged to continue attending in-session courses run by the University's English Language support Unit.

5. **Support for Learning**

We will work with you to ensure that you settle into your new academic environment and that your studies go well, and you will find that there are lots of people to support you at Nottingham Trent University.

All students at Nottingham Trent University have full access to Student Support Services. In addition, School based support networks are in place to offer you support, guidance and advice on academic and personal issues. Within the course, students experience the full support of the Biosciences Academic Team. The Academic Team Leader, with support from the Courses Manager, Course Leader, Module Leaders, and Course Tutors, takes responsibility for student support and guidance. The Module Leader will offer guidance and support to students taking each specific module.

Academic staff can be contacted by e-mail, telephone, letter, or in person.

As a new student you will experience a week long induction period at the commencement of the academic year. Induction will inform you about:

- Student Support Services at University, School and Course level;
- International Student Support
- University policies and procedures on academic systems;
- Personal development planning;
- Timetable issues, room allocations and location;
- University, School and Course Handbooks;
- Enrolment procedures;
- Computing, IT and Library services;
- Health and Safety procedures.

During your induction you will be assigned a Course Tutor and informed about the best way to get in touch with your Course Leader and Module tutors. You will have regular time-tabled sessions with your Course Tutor, in small groups. Your group tutorials will help you to reflect on your approaches to study and make connections between modules, integrating material from across the curriculum and encouraging you to achieve your maximum potential. You will also have an opportunity to discuss and deal with any personal or course-related issues which may be affecting your studies and get advice on what support the university can offer. Course tutorials can also be used for personal development planning and skills development.

For accommodation matters, University Accommodation Officers will provide you with information, guidance and continuing support, for example hall of residence, private rented accommodation, and the Landlord Approval Scheme. The Accommodation Services can be accessed through www.ntu.ac.uk.

In terms of research project topic, you will have the opportunity to provide a ranked list of choices from those put up by academic staff for the courses. You will be advised to speak to individual staff and to carry out some initial research to determine which area you are most interested in. The project supervisor will act as the main avenue of support during the *Research Project*.

Detailed guidance is also provided for each module through NOW (NTU Online Workspace), our Virtual Learning Environment.

We want you to feel part of a learning community. The residential course gives you an ideal opportunity to meet the academic team and work with your fellow students. This gives you the opportunity to work as part of a team and discuss ideas in an informal setting.

6. Graduate destinations / employability

There are a wide range of career opportunities within environmental management. You will work with leading academics on your course, so you will have gained important academic and professional skills necessary to help you obtain employment in this field.

At the end of the course, you will also have developed many transferable skills that will make you more attractive to potential employers in a broad range of careers within and beyond environmental management.

The Research Project and/or Placement will give you the skills you need to follow a career in research and development.

The University's Careers Service has an enviable reputation for helping our graduates find employment and offers individual consultations. Sessions are available to all students at NTU on CV writing and interview technique.

7. Course standards and quality

The Course Committee, with staff and student representatives, operates to discuss matters arising on the course, review module feedback and consider the course report and External Examiners' comments. Overarching responsibility for quality control lies with the School Academic Standards and Quality Committee whose remit is to provide guidance and support to academic courses.

External Examiners offer further quality control through monitoring academic standards, moderation of assessment tasks and processes.

8. **Assessment regulations**

This course is subject to the University's Common Assessment Regulations, as stated in the Academic Standards and Quality Handbook. Any course specific assessment features are described below:

The pass mark is 50% but if you achieve 60-69% overall you will be awarded the MSc with Commendation, or the MSc with Distinction if you obtain a final marks aggregate of 70% or above.

9. **Additional Information**

Collaborative partner(s): Loreus Ltd.

Course referenced to national QAA Benchmark Statements: Yes

Course recognized by: N/A

Date implemented: October, 2017

Any additional information: None

You will be using a start-of-the-art commercial e-learning system provided by Loreus Ltd. This means that you can work on your course 24/7. Loreus Ltd is a leading provider of environmental management system consultancy and training. This means that you will be working with practicing consultants and environmental management system experts. Loreus Ltd provides two of the modules (Advanced Environmental Management and Environmental Management Systems ISO 14001) as part of a collaborative agreement.

April 2017

