



SCHOOL OF NATURAL AND ENVIRONMENTAL SCIENCES

BSc (Hons) Environmental Science (F850)
&
Programme with Study Abroad (1572U)

Degree Programme Information
ACADEMIC YEAR 2024-2025

PROGRAMME FEATURES

These programmes provide a range of opportunities to develop your knowledge and skills in the interdisciplinary field of Environmental Science. All the programmes have a common core for three years. Field classes and degree-specific modules at every stage emphasise the integrated nature of Environmental Science. The full-time modular programme consists of 120 credits per year. 10 credits are equivalent to 100 hours of study time (contact time and private study). Modules vary in valency from 10 to 30 credits.

Stage 1 is common to all students, ensuring a firm foundation across the full spectrum of disciplines necessary to practise environmental science. This includes laboratory and fieldwork, individual and team problem-solving and the study of contemporary issues in environmental management. There is an emphasis on good study practice, with particular modules focusing very much on developing understanding, rather than just facts, and developing your IT, literature search and information handling skills.

From Stage 2 onwards there is a common spine of compulsory modules including an opportunity to focus on career development opportunities. There are also a range of optional modules allowing specialisation so you might choose:

- a) additional studies of the processes occurring within environmental and ecological systems or
- b) greater study of the economic and legislative frameworks for environmental management.

In Stage 3 you will undertake a major individual dissertation project module, developing research skills in ecological and environmental research and demanding high level organisational, communication and problem-solving skills. You will gain experience and knowledge in the practice of environmental impact assessment, sustainable development and environmental valuation, and have opportunity to choose from a range of optional modules from across Environmental Science, including further career development modules.

To Progress to Stages 2 and 3 you must get an overall mark of at least 40 at the preceding stage. One resit attempt is allowed per module.

Particular features of the programme are:

- sessions unique to the programme at each Stage
- fieldwork modules at each Stage.
- the opportunity to study terrestrial, aquatic and atmospheric environments.
- the opportunity to engage with local organisations involved in environmental management
- the opportunity to study both local and global environments in the context of sustainable development
- the opportunity to undertake research projects with staff active in environmental research.

The full aims and learning outcomes of the Environmental Science degree programmes are given in the degree programme specifications and regulations, which are available on the University website. It is important that you familiarise yourself with these documents, which also contain a full listing of modules in the regulations document:

-Degree programme regulations: [-F850-1572U.pdf](#)

[Degree programme specifications:](#)

Full details of your programme specification and regulations are available on the on the University website at: [Programme Regulations 2024 | University Regulations | Newcastle University \(ncl.ac.uk\)](#)

In addition, you can find more detailed information on individual modules through the [module catalogue](#).

AIMS and OUTCOMES of the DEGREE

Aims

To produce graduates with:

- i) an ability to apply understanding of a range of natural and social sciences pertinent to the study, understanding and management of environmental systems.
- ii) an ability to carry out scientific research investigations and an ability to handle information flexibly from a variety of disciplines in an integrated manner.
- iii) the necessary key skills and knowledge to gain employment as an environmental scientist or in other fields requiring good investigative and problem-solving skills.

To provide a programme of study which develops the basic knowledge and technical skills base to address the needs of employers and to enable graduates to develop the interdisciplinary background needed for effective careers in the environmental sector.

To provide a flexible programme of study which meets the FHEQ at level 6 by the end of the programme and which takes appropriate account of the Quality Assurance Agency Benchmark Statement for 'Earth Sciences, Environmental Sciences and Environmental Studies' - <https://www.qaa.ac.uk/the-quality-code/subject-benchmark-statements/earth-sciences-environmental-science-and-environmental-studies>)

For those students taking a programme with placement, to provide students with a period of practical experience and the opportunity to develop their workplace skills.

There are a number of general knowledge and skill objectives and outcomes associated with the degree; supplemented by particular objectives delivered by the individual modules that make up the programme. These are summarised below. More details and how outcomes map onto individual modules are given in the full degree programme specifications.

Learning Outcomes

A Knowledge and Understanding

Students will be introduced to the study of the terrestrial, aquatic, and atmospheric environment and human interaction with it. On completing the programme students should have gained and be able to apply their knowledge of:

- A1 Fundamental physical and biological processes within global ecosystems and their complexity and inter-relationships
- A2 The political, social, and economic implications of human interaction with the environment
- A3 Human responses to environmental problems at local to global scales including environmental impact assessment and the implications of paradigms of sustainability and sustainable development.
- A4 An understanding of legislative and policy frameworks concerned with human interaction with the environment.
- A5 Measures of biodiversity and strategies for its maintenance at a range of temporal and spatial scales
- A6 For those students taking a programme with placement, to provide students with a period of practical experience and the opportunity to develop their workplace skills.

B Intellectual Skills

- B1 Handle data from a variety of disciplines and integrate information to provide interdisciplinary insights.
- B2 Select and apply a range of methods to solve problems and produce reasoned solutions.
- B3 Develop appropriate search strategies and critically appraise primary and secondary data, information, and viewpoints to produce a reasoned evaluation.
- B4 Relate investigations to prior work and the state-of-the-art in the field and reference sources appropriately.
- B5 Interpret and effectively communicate using both quantitative and qualitative data.

C Practical Skills

- C1 Collect and record environmental data in the field and laboratory. This will require the application of a range of skills including planning, organisation, observation and recording.
- C2 Select and use appropriate laboratory and field equipment competently and safely within an appropriate risk management framework.
- C3 Design research investigations to address clearly stated objectives and to allow formal testing of hypotheses where appropriate.
- C4 Collect, record and analyse data using appropriate techniques in the field and laboratory

D Key Skills

A successful student will be able to:

- D1 Summarise and communicate in writing and orally in a manner appropriate to the target audience.
- D2 Work effectively both independently and as a member of a team.
- D3 Plan work and handle logistical constraints,
- D4 Reflect on learning experiences, take responsibility for personal learning and professional development.
- D5 Use computing and information technology effectively.

Your university programme is primarily intended to educate you in a particular discipline, but it will also provide training in transferable skills and personal development. The University maps these skills according to the Graduate Skills Framework. <https://www.ncl.ac.uk/careers/graduateframework/>

Your particular knowledge base at the end of the degree will reflect the modules that you have studied. However, you should all be able to critically assess data, analyse data using appropriate statistical methods, draw conclusions, and present them to others. You will be able to use appropriate statistical and word processing software and will be familiar with a variety of ways of presenting material graphically. You will be able to produce a substantial report, appropriately structured into sections, etc., illustrated with data as appropriate, and with references appropriately cited.

Each of your modules will be clearly linked to a series of graduate skills, some of which will be present in the learning and teaching activities and some of which will be assessed. You will be able to identify which skills are present in each module by looking at the module catalogue entry (<http://www.ncl.ac.uk/module-catalogue/modules.php>). Identifying the skills present in each module that you take will help you to recognise key skills that you can mention in interviews and on your CV.

Management of the Degree Programme

Environmental Science Teaching Staff Contact Information:

| Role | Name | Location | Email Address |
|---|------------------------|---------------|--|
| Degree Programme Director | Dr Rachel Gaulton | RIDB2 5.66 | Rachel.Gaulton@ncl.ac.uk |
| Teaching Staff | Dr Geoff Abbott | DRUMB 3.09 | geoff.abbott@ncl.ac.uk |
| Teaching Staff | Dr Sanem Acikalin | DRUMB 4.08 | sanem.acikalin@ncl.ac.uk |
| Teaching Staff | Dr Helen Adamson | AGRB 5.15 | helen.adamson@ncl.ac.uk |
| Teaching Staff | Prof Stuart Barr | CASSIE G.10 | stuart.barr@newcastle.ac.uk |
| Teaching Staff | Dr Elisa Lopez-Capel | AGRB 4.03 | elisa.lopez-capel@ncl.ac.uk |
| Teaching Staff | Prof Peter Clarke | CASSIE G.12 | peter.clarke@newcastle.ac.uk |
| Teaching Staff | Dr Martin Cooke | AGRB 5.16 | martin.cooke@ncl.ac.uk |
| Teaching Staff | Dr Alistair Ford | CASSIE G.14 | alistair.ford@ncl.ac.uk |
| Teaching Staff | Dr Shannon Flynn | DRUMB 4.02 | shannon.flynn@ncl.ac.uk |
| Teaching Staff | Prof Guy Garrod | AGRB 3.23 | guy.garrod@ncl.ac.uk |
| Teaching Staff | Dr Mark Ireland | DRUMB 2.15 | Mark.Ireland@newcastle.ac.uk |
| Teaching Staff | Prof David Manning | DRUMB 3.01 | david.manning@ncl.ac.uk |
| Teaching Staff | Dr Simon Peacock | AGRB 5.10 | simon.peacock@ncl.ac.uk |
| Teaching Staff | Dr Maria-Valasia Peppa | CASSIE G.16 | Maria-Valasia.Peppa@newcastle.ac.uk |
| Teaching Staff | Dr Amy Proctor | AGRIC 3.15 | amy.proctor@ncl.ac.uk |
| Teaching Staff | Prof. Yit Arn Teh | DRUMB 4.07 | yitarn.teh@ncl.ac.uk |
| Teaching Staff | Dr Jon Telling | DRUMB 4.01 | jon.telling@ncl.ac.uk |
| Teaching Staff | Dr Guenther Uher | RIDB 4.78 | ngu@ncl.ac.uk |
| Teaching Staff | Dr Cees van der Land | DRUMB 3.08 | cees.van.der.land@ncl.ac.uk |
| Teaching Staff | Prof Sam Wilson | DRUMB 4.10 | sam.wilson@ncl.ac.uk |
| Senior Chemical Lab Technician | David Earley | DRUMB 3.13 | David.Earley@newcastle.ac.uk |
| Senior Biological Lab Technician | Fiona Maclachlan | DRUMB | fiona.maclachlan@ncl.ac.uk |
| AESSC Education Team Leader | Miss Linzi Mackay | School Office | snesc.aessc.support@newcastle.ac.uk |
| AESSC Education Administrator | Mrs Jane Grayson | School Office | snesc.aessc.support@newcastle.ac.uk |

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|----------------------------------|------------------|---------------|--|
| AESSC Education Assistant | Miss Dana Bogova | School Office | snes.aessc.support@newcastle.ac.uk |
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External Examiner for B.Sc. Environmental Science

Dr Steve Lane
Lancaster Environment Centre
Lancaster University
Lancaster
LA1 4YQ

**Environmental Science – BSc programmes
Summary of Programme Commitments**

The University’s Student Charter is available on the internet at [Student Charter - Student Welcome - Newcastle University \(ncl.ac.uk\)](#) . It is also provided to all students as part of the Student Guide. In the Student Charter, the University undertakes to provide you with access to ‘high standards of teaching, support, advice and guidance’.

The Student Charter requires that students are provided with a ‘programme handbook which details any professional requirements, contact hours, mode of course delivery, assessment criteria, examination arrangements and regulations, academic guidance and support, and appeals and complaints procedures. The purpose of this summary is to help you locate further details about this key information in your school handbook.

Your school handbook also contains a range of other valuable information, so you should read it thoroughly and retain your copy for future reference.

Your attention is also drawn to the Student Charter Supplementary Statement of Student Rights and Responsibilities. Further information on this can be found at [NU Student Charter \(August 2023\)](#)

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| Average number of contact hours for this stage / programme: | 16 per week |
| Mode of delivery: | Lectures, seminars, workshop, field trip, computer-based tutorials see section 3 in the school handbook for details of these methods. |
| Normal notice period for changes to the timetable, including rescheduled classes: | Wherever possible, changes to the programme will be notified at least 1 week in advance, on occasion it may be necessary to make amendments at short notice; wherever possible these will not involve change to time or location, it may be that adjustment is needed due to weather conditions or at the request of a visit host. |

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| Normal notice period for changes to the curriculum or assessment: | Detailed in the module outline form and not normally changed throughout the year. In exceptional circumstances a change could be suggested by the module leader, but students will be consulted for opinion. |
| Normal deadline for feedback on submitted work (coursework): | The school operate a target turnaround of 20 working days from submission date to offer feedback on assessed submissions. |
| Normal deadline for feedback on examinations: | The normal deadline for feedback on examinations is immediately following the board of examiners appropriate to the examination period. Where a candidate has exceptional circumstances for completion of examinations, the feedback may be adjusted accordingly. |
| Professional Accreditation: | There are currently no professional accreditations associated with the programme, additional qualifications will be advised. |
| Assessment methods and criteria: | Assessment methods will vary per module and may include dissertation, practical, written work, group projects and presentations, also see section 4 in the handbook for more details about assessment and marking criteria. |
| Academic guidance and support: | Academic guidance and support is available to all candidates via the tutorial system, though seminar sessions with module tutors and through the University's support mechanisms. |