

Course Summary: May 18, 2022

# Master of Environmental Science

MEnvSci Honours

- UCAS code: **F900**
- Full time
- 4 years
- Next start date: September 2022

This four-year MEnvSci degree explores the whole environment. It covers biological organisms, our physical environment and the interactions between them.

#### Fees (per year)

- Home: **£9250**
- International: £25200

#### Entry requirements

- A Level: **ABB**
- IB: 32 points

#### UCAS Institution name and code:

• NEWC / N21

# Course overview

Our MEnvSci degree is similar to our Environmental Science BSc Honours, but includes a year of advanced study at Master's level.

You'll also study chemistry, physics and geology as applied to the study of the environment. Topics cover a wide range of subjects, including:

- plant biology
- ecology
- sustainability
- environmental law

You'll learn about the role of social and economic factors, ethics and public perception in environmental management.

In Stage Four, you can choose to specialise in the following areas:

- agriculture and environmental science
- clean technology
- ecosystem management
- environmental geochemistry

This degree prepares you for a wide range of possible careers, including:

- geology
- geomatics
- geochemistry
- environmental consultant

Whatever you choose, you'll be equipped with relevant skills in:

- experimental science
- fieldwork
- scientific investigation
- project management

#### Your course during COVID-19

Please rest assured we make all reasonable efforts to provide you with the programmes, services and facilities described. However, it may be necessary to make changes due to significant disruption.

Given the changing nature of the COVID-19 pandemic, the commitments outlined are subject to guidelines that may be in place from time to time.

View our COVID-19 Study page, which gives information about your Newcastle University study experience for the academic year 2021-22.

See our terms and conditions and student complaints information

# Quality and ranking

We have a long tradition of excellence in teaching, recognised in many external surveys and assessments, but also by our own students.

Our commitment to teaching quality and an excellent student experience is reflected through our results in national and international student satisfaction surveys.

# Modules and learning

### Modules

The information below is intended to provide an example of what you will study.

Most degrees are divided into stages. Each stage lasts for one academic year, and you'll complete modules totalling 120 credits by the end of each stage.

Our teaching is informed by research. Course content may change periodically to reflect developments in the discipline, the requirements of external bodies and partners, and student feedback.

#### Optional module availability

Student demand for optional modules may affect availability.

Full details of the modules on offer will be published through the Programme Regulations and Specifications ahead of each academic year. This usually happens in May.

To find out more please see our terms and conditions.

#### Modules

Compulsory Modules	Credits
Environment and Land Resources	10
Academic and Professional Skills	20
Investigating Rural Landscapes	20
Plants, Environment, Agriculture	10
Earth System Science	10
The Geosphere	20
Geographic Information Systems	10
Optional Modules	Credits
Agri-Food Supply Chains	20
Natural Science Research Impact	10
Ecology and Conservation	20
Interpreting Geological Maps	10
The Marine Environment	20

#### Modules

Compulsory Modules	Credits
Site Management and Communication Skills	20
Dissertation and Research Preparation	10
Ecosystem Ecology	10
Sustainable Solutions	10
Pollution of Air, Water & Soil	10
Research Methods in Environmental Pollution	20
Optional Modules	Credits
Optional Modules Landscape, Culture and Heritage	Credits 20
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Landscape, Culture and Heritage	20
Landscape, Culture and Heritage Biodiversity, Ecology and Conservation	20 20
Landscape, Culture and Heritage Biodiversity, Ecology and Conservation Global Element Cycling	20 20 10
Landscape, Culture and Heritage Biodiversity, Ecology and Conservation Global Element Cycling Geological Resources	20 20 10 10

### Modules

Compulsory Modules	Credits
Environmental Impact Assessment	20
Sustainable Development and Environmental Valuation	10
Earth and Environmental Science Dissertation	30
Optional Modules	Credits

Qualitative Research Methods	10
Countryside Management	20
Rural Planning, Politics and Society	20
Your Future - occupational awareness	10
Biodiversity Science and Management	20
Biological Modelling	20
Biogeochemistry	20
Geohazards and Deformation of the Earth	10
Career Development for final year students	20
Science Communication for Sustainable Development	10

# Ecosystem Management

All candidates shall take the following compulsory modules:

Code	Descriptive title
ACE8016	Habitat Monitoring and Assessment
ACE8041	Ecosystem Management
ACE8099	Earth and Environmental Science Research Project
ACE8116	Forest Ecology

NES8006	

Data preparation, analysis, interpretation and

presentation for MSc

# Agricultural and Environmental Science

All candidates shall take the following compulsory modules:

Code	Descriptive title
ACE8099	Earth and Environmental Science Research Project
ACE8116	Forest Ecology
CEG8608	Remediating Contaminated Land
NES8006	Data Preparation, Analysis, Interpretation and
	Presentation for MSc

All candidates shall take 30 credits of optional modules normally selected from the following:

Code

Descriptive title

ACE8211	Precision technologies and global challenges in
	managed animal behaviour and welfare
ACE8909	Precision Agriculture incorporating Non- Combinable Crops

# Environmental Geochemistry

All candidates shall take the following compulsory modules:

Code	Descriptive title
ACE8099	Earth and Environmental Science Research Project
CEG8112	Air Pollution
CEG8604	Introduction to Microbiology and Microbial Transformation of Pollutants
CEG8605	Aqueous Geochemistry
CEG8606	Sources, Fates and Control of Pollutants
CEG8608	Remediating Contaminated Land

### Clean Technology

NES8006

All candidates shall take the following compulsory modules:

Code	Descriptive title
ACE8099	Earth and Environmental Science Research Project
CEG8608	Remediating Contaminated Land
CME8012	Business and Environmental Management
NES8006	Data Preparation, Analysis, Interpretation and Presentation for MSc

All candidates shall take 30 credits of optional modules normally selected from the following:

Descriptive title

CME8038	Sustainable Industry
SPG8008	Renewable Energy: Biomass and Bioenergy
SPG8009	Renewable Energy: Policy, Politics and Ethics
SPG8014	Introduction to Hydro, Wind, Wave and Tidal Energy
SPG8016	Design, Innovation and Entrepreneurship
	in Science and Engineering

### Teaching and assessment

#### Teaching methods

Teaching is delivered through lectures and practicals in:

- microscopy
- rock and mineral identification
- geological mapping
- geochemistry

#### Assessment methods

You'll be assessed through a combination of:

- Assignments written or fieldwork
- Coursework

- Dissertation or research project
- Essays
- Examinations practical or online
- Group work
- Presentations
- Projects
- Seminar tasks/exercises

### Skills and experience

#### Practical skills

You'll develop your hands-on, practical skills with fieldwork opportunities embedded throughout your degree.

You'll be equipped with the practical skills that are sought by employers through fieldwork and access to our world-class facilities.

There are lots of opportunities to explore the environment, including:

- frequent field days, reinforcing classroom learning and helping you apply your knowledge to practical contexts
- an annual residential field course, in the UK or abroad

#### Research skills

You'll have access to our world-class analytical laboratories, supported by our research expertise. These include:

- petroleum geochemistry
- biogeochemistry
- global imaging systems
- remote sensing
- environmental impact

You'll be able to conduct high-quality research, alongside our expert academic staff. This will complement the teaching and practical classes delivered during

your degree.

# Opportunities

# Study abroad

Experience life in another country by choosing to study abroad as part of your degree. You'll be encouraged to embrace fun and challenging experiences, make connections with new communities and graduate as a globally aware professional, ready for your future.

You can choose to spend up to a year studying at a partner institution overseas.

If you choose to study abroad, it will extend your degree by a year.

#### Find out more about study abroad

### Work placement

Get career ready with a work placement and leave as a confident professional in your field. You can apply to spend 9 to 12 months working in any organisation in the world, and receive University support from our dedicated team to secure your dream placement. Work placements take place in stage 3.

You'll gain first-hand experience of working in the sector, putting your learning into practice and developing your professional expertise.

If you choose to take a work placement, it will extend your degree by a year. Placements are subject to availability.

Find out more about work placements

# Facilities and environment

# Facilities

You will be based on campus at the School of Natural and Environmental Sciences. As a student of Earth and Environmental Sciences you'll have access to our world-class facilities and analytical laboratories, including:

- gas chromatography
- gas chromatography mass spectrometry
- high pressure liquid chromatography mass spectrometry
- inductively coupled plasma mass spectrometry
- two commercial farms near Newcastle
- Dove Marine Laboratory on the coast
- research vessel, The Princess Royal

You'll also have access to two commercial farms near Newcastle.

Our University farms, Cockle Park Farm and Nafferton Farm, will give you an insight into how real-world farms operate, so you're prepared for your future. Our farms are used for research, teaching and demonstration.

You will be taught in the new, and unique, teaching space of the Houston Laboratory: part of a £2m redevelopment of Newcastle University's Drummond Building.

You'll benefit from the Great North Museum on campus. It's home to over 9,000 geological and mineralogical specimens. The Mining Institute, with one of the world's most comprehensive collections on mining engineering, is just a short walk away.

### Support

To support you in your studies, all new students entering year 1 or year 2 will receive a tablet. You can download the online learning resources you'll need for your course (helping us to make our campus more sustainable).

You'll have the support of an academic member of staff as a personal tutor throughout your degree to help with academic and personal issues.

Peer mentors will help you in your first year. They are fellow students who can help you settle in and answer any questions you have when starting university.

There's also a staff-student committee, to give you an opportunity to have a say in how your degree works.

# Your future

The environmental sector has grown rapidly over the last decade. Increasing environmental legislation means there are many new employment areas in industry and the public sector.

Our graduates have gone on to work for a wide range of organisations including the European Parliament, Meteorological Office and Oxfam.

Graduates from our environmental science course have gone on to undertake roles such as environmental consultancy and environmental engineering, and find employment with:

- conservation bodies such as Natural England
- the Environment Agency
- water companies
- local government environmental health departments
- other environmental protection agencies

### Make a difference

#### Careers support

Our award-winning Careers Service is one of the largest and best in the country, and we have strong links with employers. We provide an extensive range of opportunities to all students through our ncl+ initiative.

#### Visit our Careers Service website

### Recognition of professional qualifications outside of the UK

From 1 January 2021 there is an update to the way professional qualifications are recognised by countries outside of the UK

Check the government's website for more information.

# Find out more...

- Go online for information about our full range of degrees: www.ncl.ac.uk/undergraduate
- To watch videos about student life in Newcastle, visit **www.ncl.ac.uk/lovenewcastle**
- Visit **www.ncl.ac.uk/tour** to take virtual tours of the campus and city
- Book for an Open Day to come and see us in person www.ncl.ac.uk/openday
- Contact us online at www.ncl.ac.uk/enquiries or phone +44 (0)191 208
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