ENVIRONMENTAL SCIENCES

Environmental Science students at the University of Stirling seek to understand the processes driving the evolution and maintenance of biodiversity – from how environments and ecosystems have changed over annual and millennial timescales, to predicting and mitigating the future impacts of change and natural hazards caused by human behaviour.

Stirling has a proud history of innovation in environmental research and study. It is also a hub for conservation and environmental organisations and we are ideally located for diverse landscapes and industrial sites.

We are leaders in Environmental Protection and Biological Conservation, with 100% of our Environmental Sciences research rated as having either outstanding or very considerable impact in REF 2021.

Our staff are involved in many international projects around the world, including in Malaysia, Botswana, Nigeria, Iceland, Norway, Greenland, Ukraine, Hungary and China.

RESEARCH COURSES

Research excellence underpins all we do. As part of our research community, you will contribute innovative, practical and applied solutions to the challenges facing society today.

We offer research options, including PhDs, in the following areas:

· Conservation
· Biogeochemical cycling
· Earth observation
· Environmental change
· Environment, heritage and policy
· Environmental protection
· Evolutionary ecology
· Landscape history
· Plant ecology and biogeography
· Terrestrial and aquatic ecosystems

Many of our courses offer multiple start dates, please check course webpages for details.

FT Full-time course   **PT** Part-time course

To find out more about identifying a supervisor and submitting a research proposal, visit: **stir.ac.uk/research**

ENVIRONMENTAL MANAGEMENT

Campus based
MSc, PG Dip, PG Cert

Click for course web page

This course is widely recognised as an international leader in training environmental managers and has more than 1,000 alumni worldwide.

Stirling is a hub for conservation activity in Scotland and we work closely with organisations such as NatureScot, Scottish Environment Protection Agency, and the Royal Society for the Protection of Birds in conducting research, arranging placements and field training.

You will learn to address issues such as adaptation to climate change, conserving biodiversity, environmental impact assessment and sustainable energy management.

Practical teaching in specialist laboratories support a wide range of research interests from ecology to analytical chemistry, to thin section and micromorphology. Our Stirling Controlled Environment Facility is a world-class experimental facility used for conducting experimental research investigating the impacts of climate and climate change.

As part of this course, you may take a residential field module to learn practical identification, surveying, measuring and sampling skills. This is a six-day residential field course in the Cairngorms National Park. You will gain an intensive practical experience in a range of habitat types that will give you a knowledge of environmental monitoring techniques and their limitations, an understanding of survey techniques and sampling issues, and an awareness of up-to-date technologies available for fieldwork.

CORE MODULES
Module choices will be determined by whether you undertake the core Masters degree or a specific pathway.

Check course web page for optional modules

PATHWAYS
You can work towards the MSc Environmental Management, or opt to specialise in one of the following pathways.

· MSc Environmental Management (Conservation)
· MSc Environmental Management (Energy)
· MSc Environmental Management (Informatics)

CAREER PROSPECTS
Our graduates work for organisations such as environment protection agencies, major conservation bodies, local authorities and independent environmental consultancies. Their roles include:

· Environmental Consultants
· Environmental Protection Officers and Scientific Advisers
· Environmental Managers

**Course Starts: September and January
Flexible pathways available**

FT PT

ENVIRONMENTAL REMOTE SENSING AND GEOSPATIAL SCIENCES

**Campus based
MSc, PG Dip, PG Cert**

Click for course web page

As we have entered an era of high-resolution Earth observation, there has been an explosive growth in the use of Remote Sensing data. Remote Sensing data is regarded as the "Big Data" of the environmental monitoring world, making graduates with these skills sought-after by employers.

Our course has a unique emphasis on developing and applying remote sensing solutions for understanding and monitoring environmental processes on Earth and other planetary bodies. Our Masters has a focus on the use of Remote Sensing data and services for climate research and the digital transformation of the environment.

The course covers topics from satellite, space-based, (un)manned airborne and ground-based platforms and provides professional training in remote sensing, Geographic Information System (GIS) data analytics, modelling and theoretical/field/lab skills.

The course will allow you to network and gain industry experience through modules including work-related assessments and guest speakers from public, private and third sector organisations.

The optional field skills module is a six-day residential field course in the Cairngorms National Park. You will gain an intensive practical experience in a range of habitat types that will give you a knowledge of environmental monitoring techniques and their limitations, an understanding of survey techniques and sampling issues, and an awareness of up-to-date technologies available for fieldwork.

CORE MODULES
· Fundamentals of Remote Sensing
· Representing and Manipulating Data
· Applications in Earth Observation
· Geomatics
· Planetary Exploration
· Dissertation

Check course web page for optional modules

CAREER PROSPECTS
You will be prepared to build a successful career in the fast-growing downstream space and technology-driven industries or work in environmental, heritage and resource management sectors, including government regulators, local authorities, universities and space agencies.

Course Starts: September

FT PT