ECOLOGY
BSc (Hons)
WHY CHOOSE STIRLING?

Stirling is a University committed to the Environment, and provides strong, research-led teaching in Ecology. Our staff and students regularly conduct research and training around the world, from the alpine tundra to the tropics. We also maintain strong contacts with external conservation and environmental organisations, and provide a hands-on approach where our students learn about people’s relationship with the natural world.

COURSE DETAILS

The degree in Ecology is designed to help you understand how animals, plants, fungi and microorganisms interact with their environment, as well as the relationship between people and the rest of the biosphere.

The course covers the core conceptual issues of Ecology in its broadest sense, but also provides hands-on opportunities for learning the techniques to study and analysing ecological relationships across all types of organisms. The degree covers a wide range of topics including:

- Evolutionary Ecology
- Conservation Ecology
- Molecular Techniques
- Global Environmental Issues
- Animal Ecology
- Plant Ecology
- Tropical diversity
- Food Security

Final-year projects are a valuable part of our degrees, which have led to many final projects being published. These are supervised by a member of staff but may also be carried out in conjunction with an external organisation. Examples include:

- Plant biodiversity patterns in the southern Highlands
- Buzz-pollination and ecology of bumblebees
- Climate change and the altitudinal limits of native montane plant species
- The influence of diet on seaweed fly mating and oviposition behaviour
- Heavy metal adaptation in rare plants
- Ecology and conservation of forest elephants
- Spatial and temporal patterns in pine marten diet in Scottish plantation forest

REASONS TO CHOOSE THIS COURSE

1. ECOLOGICAL INTERACTIONS
   Ecology allows you to understand the connections between organisms and their environments.

2. GLOBAL CHANGE
   Ecology is a fundamental science to understand the impact of people on the environment.

3. DIVERSE SKILLS
   From field work to experiments to analysing large-scale data sets, ecology trains you in transferable skills.
FIELDWORK
Fieldwork is an essential part of an ecologist’s training. Stirling’s campus location is an ideal base from which to make field excursions, whether to study lekking Black Grouse in the Highlands, the growth of trees on the sides of the Ochil Hills, or the distribution of animals in the Forth Estuary.

The programme includes a compulsory field class in Scotland in the second year, and an optional 10-day field course during 4th year to Southern Europe. (Students must pay most of the costs of their travel, accommodation, and subsistence for the field courses.) The 10-day field course in ecology and animal biology takes place in the Cévennes of France; a rugged mountain landscape of exceptional natural beauty and tremendous biodiversity. The organisms that live there include over 2,300 flowering plant species (24 of which are endemic), 2,000 invertebrate species and 300 vertebrate species. Notable among these are wild boar, otters, three vulture species (including endangered Cinereous vultures), and grey wolves. The region exemplifies the deep historical connection between humans and the natural world, and is recognised as a UNESCO World Biosphere Reserve and World Heritage Site. Here you will learn techniques in identification, field sampling, experimental design, data analysis and presentation.

Students participating in the week-long field course in Spain stay at a field station 2 km away from the traditional hill-top town of Sorbas, near Almeria, in one of the driest parts of Europe. Through a series of excursions and intensive field projects students are introduced to environmental processes and resource management in arid environments.

CAREER OPPORTUNITIES
With this well-respected degree, our graduates have entered a range of jobs in academic and applied ecology - including roles as university and government researchers, natural history filmmakers, nature reserve managers and policymakers with environmental agencies and conservation bodies. Our graduates have found employment as:

- Energy Advisor
- Environmental education officer
- Environmental manager/consultant
- Recycling officer
- Waste management officer
- Geographic Information Analyst
- Nature/Conservation Officer
- Ecologist

“Studying Ecology at Stirling appealed to me because of the range of interesting topics covered throughout the course. In addition to this, the campus provides a beautiful environment for studying natural sciences.”

Viki Bates,
Year 4 student
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<th>SEMESTER</th>
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<th>MODULE 2</th>
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<td>1</td>
<td>Ecology: An Introduction</td>
<td>Our Blue Planet, Building PlaneEarth OR People and the Environment</td>
<td>Practical Science Skills I: Laboratory Skills</td>
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<td>2</td>
<td>Introduction to Physiology</td>
<td>Our Thirsty Planet, Landscape Evolution OR Global Environmental Issues</td>
<td>Practical Science Skills II: Field Skills</td>
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<td>2</td>
<td>3</td>
<td>Evolution and Genetics</td>
<td>Introduction to Cell Biology</td>
<td>Biology Field Course</td>
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<td>4</td>
<td>Biodiversity</td>
<td>Statistical Techniques</td>
<td>The Biosphere</td>
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<td>3</td>
<td>5</td>
<td>3 to 4 modules from a range of Biology and Environmental Science subjects including: Animal Physiology, Conservation Biology, Population and Community Ecology, Environmental Policy and Management, Habitat Management and Restoration, Statistics using R, Geographic Information Systems</td>
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<td>Plant Ecology</td>
<td>1 or 2 modules from Biology and Environmental Science including: Tropical Rainforest Ecology, Methods and Applications in Environmental Sciences, Conservation Management, Earth Observation, Spain Field Course, Iceland Field Course</td>
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<td>4</td>
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<td>Individual Research Project</td>
<td>Choice of 2 to 4 modules including: Conservation Biology, Population and Community Ecology, Molecular Evolution and Phylogenetics, Habitat Management and Restoration, Molecular Techniques, Sustainable Water Management, France Field Course, Gabon Field Course</td>
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**COMPULSORY MODULES**

* Options may vary

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**CONTACT**

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