

#### Master of Science

## Environmental Geography

*Understanding the interactions between humans and their environment in space and time.* 





Deciphering environmental processes and patterns often requires the 'bigger picture'. Exploring how the spheres interact is a central task of a modern, integrative environmental science.



Field campaigns complement in-class experiences with practical insights into current research topics and methods such as near-surface remote sensing.

# Integrative environmental sciences.

Environmental changes at any scale, from global to local, are of crucial importance to life on planet Earth. In addition to climate change, the major contemporary challenges include changes in biodiversity, soil degradation, and increases in mass movements. Often the dynamics of such environmental processes require an understanding of the spatial and temporal couplings between the atmosphere, biosphere, relief sphere, pedosphere, and hydrosphere. In addition, the interaction with human activities is of utmost importance. Physical geography – as an interdisciplinary field with a marked focus on the environment-society nexus – is among the core disciplines addressing and examining these environmental changes.

## Fit to tackle change.

The English-taught master's programme 'Environmental Geography' provides expertise and practical experience in the field of environmental systems science from an explicitly interdisciplinary perspective. The combination of core areas in the natural sciences and contextualization from the social sciences (e.g. ecosystem services and geographical conflict research) ensure that our students receive training that is unique in Central and Eastern Europe. Research-led teaching, stateof-the-art quantitative methods, and training facilities such as a dating laboratory or the University's Botanical Garden allow for an application- and target-oriented programme of study. Students receive training in the analysis and evaluation of complex environmental systems, in critical reflection upon the research process, in abstraction of research results, as well as in oral and written communication of findings.



Your area of specialization provides a solid basis for a career in environmental research or practice-oriented employment in fields relating to ecology and spatial sciences

## Attractive career perspectives.

The ongoing trend of global environmental change, depletion of resources, and the social perception of these developments are leading to an increased political and economic focus on topics relating to the environment and sustainability. This situation is driving up demand for experts with research- and practice-oriented training in the environmental sciences. Our graduates are thus prepared for a broad range of career opportunities in the private and public sectors. Possible fields of activity include:

- regional and urban planning
- nature conservation
- environmental planning and consulting
- Iaboratory-based environmental analysis
- science and research
- geoinformation services
- development cooperation

Module overview	40 ECTS
General Environmental Geography <ul> <li>Theories in Environmental Geography/Scientific Work</li> <li>Debated Topics in Environmental Geography</li> </ul>	E E
Advances in Environmental Geography <ul> <li>Earth, Soil &amp; Surface</li> <li>Climate, Water &amp; Vegetation</li> </ul>	S E S E
<ul> <li>Environment and Society</li> <li>Geographies of Environment and Development</li> <li>Emergence and Development of 'the Environment' as a Social &amp; Political Issue</li> <li>Ecosystem Services</li> </ul>	S S L S
Methods and Skills	35 ECTS
Methods in Environmental Geography (among others) <ul> <li>Ecological Modelling</li> <li>Remote Sensing</li> <li>Multivariate Statistics</li> <li>Time-series Analysis</li> <li>Geochronology</li> <li>Isotope Biogeochemistry</li> </ul> Research Training Research Workshop	E E E E P E P S E P
Elective	15 ECTS
Free Choice Internship (4 weeks)	
Master`s Thesis	30 ECTS
L = Lecture, E = Exercise, S = Seminar, P = Practical Course Total	120 ECTS

## Your master plan.

The thematic block of the master's programme consists of one general module, two advanced modules ('Earth, Soil & Surface' and 'Climate, Water & Vegetation'), and a module in 'Environment & Society'. In addition, electives in methodological concentrations of the student's choice, numerous field exercises, and a range of individual electives cater to the students' personal interests. Your career-oriented qualification is reinforced with a compulsory internship in a non-university setting.



*Our solution-oriented educational approach emphasizes independent work in small teams.* 



At the University of Bayreuth, you will find a wide range of opportunities for international exchange and focused education.

## Interested?

You have already earned a degree, preferably in geography, landscape ecology, or a different branch of environmental science. If you are not yet able to submit your degree certificate, you can still temporarily enrol for one semester if you have already earned at least 135 ECTS points and it will be possible for you to present a bachelor's certificate with a final grade of 'good' or better ('2,5' on the German grading scale).

#### The application deadline is the 15th of July.

#### Start Date: Winter Semester (mid-October)

Please visit our website for more detailed information about the degree programme and the application process.

#### www.envigeo.uni-bayreuth.de

## The University of Bayreuth.

The University of Bayreuth is currently rated among the top young universities according to the Times Higher Education global ranking '150 under 50'. This ranking focuses on the top 150 universities worldwide founded less than 50 years ago. As a medium-sized campus university, we place less emphasis on growth and more on ensuring the highest quality of our infrastructure. In doing so, the University of Bayreuth focuses on the areas of emphasis in the various disciplines and on developing a range of interdisciplinary links that ensure it a place among the best universities internationally. Environmental research has a long-standing tradition in Bayreuth. About 25 research groups are organized in the Bayreuth Center of Ecology and Environmental Research, which provides unique opportunities for national and international students.





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