

# Applied Ecology

The aim of the Programme is to train Master's in Life Sciences with fundamental knowledge of the ecosystem processes and their evaluation methods, the principles and systems of nature management and environmental protection. The graduates will be ready for the research and innovation-based professional activity and doctoral studies.

## **The outcomes of study programme**

Upon the completion of the study programme, graduates will be able to:

- select scientific research methods and methods of mathematical statistics in conducting specific research;
- evaluate and select the measures for the protection of the terrestrial, aquatic and anthropogenic ecosystems;
- identify preventive measures for pollution dispersion in ecosystems and select appropriate environmental bioindication methods;
- to prepare nature management plans for the protected territories; evaluate the concepts of the environmental policy and substantiate the measures;
- to apply the principles, methods and systems of the selected area (different biodiversity groups, forest ecosystem restoration, formation and management, sustainable development and environmental science) in the environmental activity

## **Title of the courses:**

Statistical Methods in Ecology  
Geographic Information Systems in Ecological Research  
Environmental Bioindication  
Diffusion of Pollution in Ecosystems  
Diversity and Protection of Terrestrial Ecosystems  
Scientific Research Methodology in Ecology  
Diversity and Protection of Hydroecosystems  
Anthropogenic Ecosystems  
Nature Management  
Environmental Policy  
Plant Diversity and Conservation  
Vertebrate Diversity and Conservation  
Invertebrate Diversity and Conservation  
Ecological-Evolutionary Genetics  
Ecological Basis of Forest Regeneration  
Management of Sustainable Forest Stands  
Sustainable Forestry Development  
Forest Management in Protected Areas  
Environmental Epidemiology  
Ecohydrology  
Radioecology  
Heavy Metals in the Environment  
Planning and Organization of Ecological Research  
Application of Multiannual Statistical Methods in Ecological Research  
Professional Educology  
Consulting Methodology

Final Thesis
<b>Faculty of Forest Sciences and Ecology</b> <b>Group of Fields of Study</b> Life Sciences (D) <b>Length of Programme</b> 2 years <b>ECTS credits</b> 120 <b>Name of Qualification</b> Master's in Life Sciences
<b>Contacts</b>  <b>Faculty of Forest Sciences and Ecology (inquiries regarding study programme)</b> <b>Contact persons of the programme:</b> Ms. Aida Stikliene, aida.stikliene@vdu.lt <b>Address</b> Studentu str. 11, LT-53361 Kaunas distr., Lithuania <b>Website</b> <a href="https://zua.vdu.lt/en/faculties/faculty-of-forest-sciences-and-ecology/">https://zua.vdu.lt/en/faculties/faculty-of-forest-sciences-and-ecology/</a>