Level: Master

Course title: GIS Applications in Environmental Monitoring and Protection

Status: elective

**ECTS**: 5

## Requirements: None

# Learning objectives

Environmental planning is an interdisciplinary approach to solving problems of vulnerability and the use of natural resources. Geospatial data, GIS software, and simulation models are used as tools to facilitate the planning process with the aim of finding a sustainable balance between economic, social and environmental factors. The goal of this course is to train students for the application of geoinformation methods and applications for monitoring and management of protected natural areas and ecosystems. Concrete practical examples serve to provide students with the most important theoretical basis for the environmental planning.

## Learning outcomes

Ability to apply geoinformation methods and applications in the prevention, detection, anticipation of problems related to the use and conservation of natural resources. The use of GIS in the continuous monitoring of the environment.

## Syllabus

# Theoretical instruction

The concept of environmental planning and management of natural systems; Monitoring the quality of the environment through methods of geoinformation. Modelling, simulation and prediction of environmental planning. Risk analysis. Assessment of the degree of pollution.

Weekly teaching load				Other:
Lectures: 2	Exercises: 2	Other forms of teaching: 0	Student research: 0	