Level: master

Course title: GIS Standards and Spatial Data Infrastructure

Status: elective

ECTS: 5

Requirements: none

Learning objectives

The goal of this course is to acquire knowledge of the standards in GIS, reference data and process models, terminology, protocols and ISO standards, as well as the knowledge of the source, check, storage and use of spatial data analysis and modelling of space.

Learning outcomes

Knowledge and skills for the analysis, modelling, and the use of spatial representation - georeferenced data, using a common protocol for implementation of the standard model of spatial and non-spatial data, different types of GIS databases and standard GIS terminology.

Syllabus

Theoretical instruction

Introduction to Spatial Data Infrastructure standards. Standards of attribute data. Services and protocols for data exchange. Standard GIS terminology. Metadata. ISO Standards. Open GIS.

Practical instruction

Transformation of spatial data. Locating the entity with the given set of attributes. Analysis of overlapping layers. Network analysis. Digital terrain analysis. Geovisualization.

Weekly teaching load 3 (45)				Other:
Lectures: 2	Exercises: 1	Other forms of teaching:	Student research:	