

# Computer Science and GIS (Blaž Barborič, lecturer)

**Subject code:** GIS

**Academic year:** 2.

**Lectures:** 30

**Tutorials:** 60

**ECTS:** 9

## **Aims of the course:**

The students will learn about the basics of geographical information systems (GIS), their wide range of applicability. They will be acquainted with GIS software tools and various types of spatial data, its analysis and cartographic images. The focus is on understanding the topics and the concept of GIS and their applicability in practice. Since the most common final product of the use of GIS is a map or a graphic image of processed data, the students will be acquainted with the basics of cartography.

## **Subject content:**

GIS and geoinformatics, raster and vector GIS, data sources, data capture, transformations, data georeferencing, examples of the use of geoinformatics, GIS analyses, remote sensing, GPS (global positioning system) and its application.

## **Teaching methods:**

Lectures, tutorials, seminar work

## **Study obligations:**

written and oral exam, seminar work and presence at lectures and tutorials.

## **Literature**

1. Burrough, P.A., McDonnell, R.A., 1998: Principles of Geographical Information Systems. Spatial Information Systems and Geostatistics. Oxford University Press, New York.
2. Podobnikar, T., Perko, D., Krevs, M., Stančič, Z., Hladnik, D., 2004: Geografski informacijski sistemi v Sloveniji 2003-2004 (*Geographical Information Systems in Slovenia 2003-2004*)