



Co-funded by the
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Map digitization
No of Credits: 4,5 ECTs
Revised BSc. programme



Course presentation

The course provides an in-depth understanding of the principles and techniques involved in digitizing maps. Students will learn how to convert paper maps into digital formats, work with GIS (Geographic Information System) software, and create accurate and visually appealing digital maps.

The principal purpose of the course is to give students the following knowledge:

- Tools use for digital mapping
- Equipped with knowledge about geographic information systems and specialized map digitalization.
- Process of obtaining databases from remote sensing imageries.
- Process of converting paper maps into digital maps
- Process of building maps from field data collection

There are 10 topics in this course include: (1) Overview of map digitalization, (2) Overview of GIS and its applications. (3) GIS software and structure, (4) Get familiar with the ARCGIS interface; (5) Building a geodatabase; (6) Digitizing maps from field data collection, (7) Digitizing maps from remotely sensed data; (8) Digitizing manual paper maps, (9) Automatic digitizing paper maps, (10) editing digital maps.

The course will make most of interactive and self-reflective methods of teaching and learning. By the end of the course, successful students will:

- Understanding the fundamentals of map digitization and the importance of digital mapping in various application.
- Collect, organize and clean geographic data for digitization
- Digitize map features using GIS software
- Perform spatial analysis and geoprocessing tasks on digitized data
- Design and create visually appealing digital maps
- Interpret and document map metadata.
- Apply digitization skills to real world mapping projects