Geoinformatics

Urbanization, environmental crises, use of natural resources, security, and migration are examples of complex problems where location plays an essential role. Our ability to measure, model, analyze and visualize these complex phenomena is a key in understanding them and solving the problems. Geoinformatics represents the real world by digital models. The models enable analysis, planning, simulation, and communication for decision makers on dynamic processes from local to global levels.

The Master’s Programme in Geoinformatics has its special focus on acquisition, analysis and visualization of geospatial data. It integrates engineering applications within environmental sciences. The learning outcomes consist of technical, mathematical, computational and visual knowledge and skills in the management of spatial phenomena. The programme offers students the possibility to use state-of-the-art geoinformation technologies in developing new computational methods and applications. In addition to wider perspective, students may focus their studies on geodesy, photogrammetry, laser scanning, remote sensing, geographic information technologies or cartography.

This master’s programme educates experts for key-positions in the academia, industry, and government. Through efficient integration of knowledge and information technologies, geoinformatics enables new ways of creating science and business within socioeconomical life management. Applications range from, for example, personal location based and mobile services to public applications in environmental, hydrological, geological, and archeological mapping, as well as to regional and urban planning, security and safety monitoring tasks.