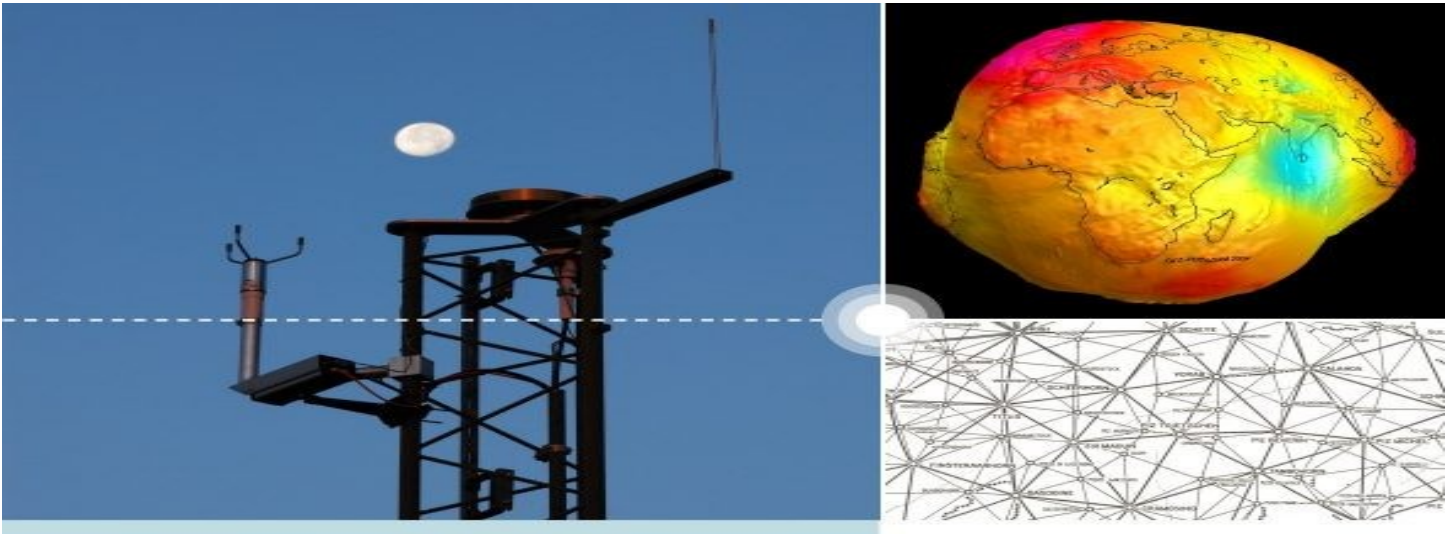


# Branch: Geology



**Code:** GEOGEO

**Option:** Geodesy and geoinformation

**Level:** Bachelor

**Prerequisites:** Scientific baccalaureate or equivalent

## **Opportunities**

If you decide to start your career after graduating with a bachelor's degree in geodesy and geoinformation, opportunities will open up in the private sector (geodesy and planning offices, hardware and software development, automotive industry) as well as in the geodesy and development administration of the state and municipalities.

## **Description**

The purpose of geodesy is to record the living space of man by surveying, processing the geoinformation and presenting it in a task-oriented manner. Geodesists describe, arrange and record the living space according to certain characteristics and participate in its design and modification.

In addition to conventional measuring tools such as theodolites, laser scanners and cameras, geodesists use information systems, modern satellite technology and digital remote sensors. They develop automatic and computerized procedures for the acquisition, processing, analysis and visualization of spatial information. The various studies range from global terrestrial satellite measurements to field studies. The geoinformation produced by the geodesist ensures the legal security of the citizen in the official surveying system and is a

prerequisite for the establishment, regulation and planning of public services. The geoinformation produced by the geodesist ensures the legal security of the citizen in the official surveying system and is a prerequisite for creation, regulation and planning measures. Geodetic measurement methods are also playing an increasingly important role in disaster management, in the recording of environmental risks and in the exploration of the earth system and planets.

### **Specific competences:**

As a graduate, you will have a wide range of basic technical and methodological skills. These include surveying and remote sensing technologies as well as geoinformation and spatial planning. You will be able to record, analyze and visualize changes in people's environment. In the field of geoinformatics, you will be able to use specialized methods to solve problems. You will also have a good knowledge of extracting, processing and visualizing accurate geoinformation.

During your studies you will gain an overview of the different fields of geodesy. You will be familiar with the application of the respective basic methods and instruments of land and building surveying, terrestrial surveying, photogrammetry, remote sensing, satellite geodesy, cartography, geoinformatics and land and city development.

### **Quality and competences:**

In addition, you will have developed a deeper understanding of spatial relationships. Thanks to the interdisciplinary orientation of the study program, you will also be familiar with the legal framework of your work and with spatial planning concepts, as well as with land and property valuation and with spatial planning measures in rural and urban areas