

Branch: Environmental Science and Engineering



Code: EARSCI

Option: Earth Science

Level: Bachelor

Prerequisites: Scientific baccalaureate or equivalent

Opportunities:

If you decide to pursue a career after completing a degree in geosciences, a variety of opportunities will be available to you. Possible fields of activity are data collection and analysis as well as raw material extraction, environmental consulting or process and product development. In addition, you can work as an assessor or expert or in restoration and information and knowledge management.

Description

In addition to comprehensive basic knowledge, the program offers the possibility of individual specialization.

The Bachelor's program offers a broad, interdisciplinary and research-oriented education in the field of geosciences

The course focuses on the structure and development of the planet Earth as well as on the processes taking place in and on this dynamic system. Other contents are the development of life as well as the effects of human interventions on the environment. Mathematical and scientific methods and results play a central role in the study of these subjects. The exploration and use of resources, the research and development of existing materials and the assessment of natural hazards are also covered. In addition, the curriculum covers biodiversity, climate change,

geochemical analysis of material cycles, environmental pollution, environmental remediation and satellite observation methods.

In addition to the basic skills, the program allows students to focus on one of the core areas of geosciences: geology, palaeontology and geobiology, mineralogy or geophysics.

Specific competences:

As a graduate, you will be able to understand geoscientific issues and work on them independently using appropriate methods. Your knowledge will enable you to develop solution strategies for subject-specific tasks in various fields. Depending on the profile of the study, these include environmental and climate protection, raw material and energy production, construction and spatial planning, material development or natural phenomena, research into biodiversity in space and time and geohazards. In your work, you will draw on interdisciplinary knowledge from mathematics, physics, chemistry or biology.

Quality and competences:

At the end of this program, you will also be familiar with the processes of the formation of the Earth. You will understand its structure, physical properties and material components. In addition, you will know the processes that have shaped and continue to shape the Earth and the diversity of life that exists today. You will also be able to identify minerals and rocks and document them in geological profiles and maps. Depending on your choice of major, you will also be able to acquire additional and specific knowledge in your discipline.

Through the mapping and field exercises that accompany your studies, you are used to putting your skills into practice. Because of the teamwork, you have special social skills, you know how to handle conflicts and take responsibility for your actions.