

Geosciences are a modern and diverse science that deals with sustainable solutions to current challenges facing our society. At the GeoCentre we research, among other things, the:

In research, geoscientists work with highly specialised and high-resolution chemical and physical laboratory and field analysis.

Therefore, the geosciences are a very diverse branch of science in which there are constantly new research findings and methodological developments. Basically, geoscientists deal with the interrelationships and interactions of the Earth system and the structure, evolutionary history and current and future state of our planet Earth and its habitats. All geoscientific processes of the Earth system in the lithosphere, hydrosphere and biosphere are examined. This includes all geological, chemical, physical and biological procedures and processes that have taken place and are currently taking place from the formation of the Earth to its present appearance. Current issues and important scientific areas are research into raw material deposits (metals, oil, natural gas), geothermal energy, natural disasters (volcanoes, earthquakes), climate impact research, the development of new materials (CO₂-neutral cements, high-performance ceramics, bone substitutes) and engineering geological and hydrogeological issues (e.g. subsoil investigations, slope analyses, geophysics). e.g. subsoil investigations, landslides, designation of water protection areas, investigations of the water cycle), as well as the investigation of past and present ecosystems (climate archives, biodiversity, reaction of organisms and ecosystems to environmental influences).

The Master's programme in Geosciences begins in the winter semester and consists of four semesters. In the first three semesters, in-depth knowledge is taught in the chosen fields of study. This includes, for example, field exercises and laboratory methods. In a key qualification module, you can already complete an internship in a company or a research institute. In terms of content, the Master's programme in Geosciences builds on the Bachelor's programme in Geosciences. The aim of the Master's programme is to provide in-depth geoscientific methods and knowledge as well as research-qualifying scientific working methods. The Master's programme is research-oriented and its content is based on the research foci of the Erlangen Geosciences:

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1st semester (WiSe) Courses to extend the basics acquired in the Bachelor's degree and introduction to the major and minor fields of study in preparation for the field and laboratory courses offered in the following semesters

Lecture-free period: industrial internship or mapping/project work or module field exercise

2nd semester (SoSe)

Semester-long lectures and exercises, key qualification module

Lecture-free period: industrial internship or mapping/project work or module field exercise

3rd semester (WiSe)

Consolidation of knowledge of the research modules; comprehensive courses whose content serves as direct preparation for the Master's thesis, key qualification module

Lecture-free period: industrial internship or mapping/project work or field exercise module

4th semester (SoSe)

Master's thesis + Master's colloquium

You can choose two out of six possible fields of study, depending on your individual interests.

The following fields of study are offered:

Note: If you apply as international student only "Palaeobiology-Palaeoenvironments" and "Climate and Earth Systems" can be chosen other fields are not available. Please visit our homepage for more information. Depending on the individual orientation, there are numerous, different career opportunities, e.g. in engineering offices, universities, chemical industry, State Office for the Environment, laboratories, museums, research centres. The career prospects are very good due to the scientific orientation.

An explanation of what the individual specialisations deal with in detail can be found on our homepage or on the official information sheet for the Master of Geosciences.

Together with our students, we explore the Earth system to find solutions for the challenges of the future.

We research:

We offer:

The numerous fields of geosciences also include a large number of different professional fields.

Geoscientists work in Germany and abroad, for example in:

The career prospects are very good due to the broad scientific education. During your studies in geosciences, you will definitely have the opportunity to spend one or more semesters abroad. For this purpose, we have concluded partnership agreements with universities in Europe and the rest of the world. You can find an overview of the most common opportunities for a stay abroad, e.g. Erasmus or our direct exchange with universities in the USA, on the pages of the Faculty of Natural Sciences. Here you will also find information about internships abroad especially for natural scientists.

Already in the first semester you need a geological hammer and a magnifying glass for the exercises (purchase costs: approx. 60-70 Euros). (Travel) costs are incurred when participating in excursions. However, since FAU provides some financial contributions for the excursions, the personal costs are not too high.

15.07.

Bachelor's degree in geosciences or another related natural science degree programme.

Currently, a qualification score of 2.5 applies to the Master's programme in Geosciences. Those who do not achieve the qualification score have the chance to be admitted via a qualification assessment procedure. For admission to the Master's programme in Geosciences, a proven knowledge of English at the level "English Level B 2 (Common European Framework of Reference for Languages - CEFR) Vantage or Upper intermediate" is required.

An application for the summer semester is only possible if students in a Master's programme of Geosciences change the university. Examination results still missing at the time of application can be submitted later. English B2, DSH

An average grade of 2.5 is required for the bachelor's degree. If the grade is lower, a qualification assessment procedure is carried out. At worst, the average grade of the bachelor's degree must be 3.5.

Our Student Advice and Career Service (IBZ) is the central point of contact for all questions about studying and starting a degree programme. Our Student Service Centres and subject advisors support you in planning your studies.

Degree: Master of Science

Duration of studies in semester: 4

Start of degree program: Winter semester

Study location: Erlangen

Number of students: 50-150

Subject group: Mathematics, Natural sciences

Teaching language: German or English

Admission Requirements: Qualification assessment

Admission requirements (first semester): Qualification assessment

Application deadline winter semester: 15.07.

Content-related admission requirements: Bachelor's degree in geosciences or another related natural science degree programme.

Currently, a qualification score of 2.5 applies to the Master's programme in Geosciences. Those who do not achieve the qualification score have the chance to be admitted via a qualification assessment procedure. For admission to the Master's programme in Geosciences, a proven knowledge of English at the level "English Level B 2 (Common European Framework of Reference for Languages - CEFR) Vantage or Upper intermediate" is required.

An application for the summer semester is only possible if students in a Master's programme of Geosciences change the university. Examination results still missing at the time of application can be submitted later. General language skills: English B2, DSH

Details and notes: An average grade of 2.5 is required for the bachelor's degree. If the grade is lower, a qualification assessment procedure is carried out. At worst, the average grade of the bachelor's degree must be 3.5.