

## FREIBURG »GREEN CITY«

Freiburg earned this name and reputation due to its high environmental standards, its innovative research and development, and its general attitude toward the environment. With its extensive use of solar energy and other renewable sources, the city attracts researchers and environmental organizations from around the world. But Freiburg is green

not only because of its policies and politics. No other city of comparable size (230.000 inhabitants) has such a diversity of landscapes, ranging from the mountains of the Black Forest to Mediterranean-type vegetation in the Rhine valley.

Freiburg is a traditional and at the same time young and dynamic University town and one of the most beautiful and attractive cities in Germany. Located close to France and Switzerland it is an ideal starting point for exploring Europe.

## FACULTY



Old and new:  
historical Geology building  
mirrored by the modern  
lab building

Research focuses on sustainable use and protection of natural resources, the adaptation of ecosystems and human-environment systems to global change, sustainable development, and natural hazards and risks.

The Faculty comprises forest, environmental and earth sciences as well as geography and offers a range of B.Sc., M.Sc., and PhD degrees in these fields.



Field trip to the Colorado Plateau

## FACTS AND FIGURES

Duration: 4 semesters, 120 ECTS credits  
Course start: October  
Language of instruction: English  
Application deadline: May 15  
Language prerequisites: level C1

The program is designed for students with a bachelor's degree in the field of earth sciences or environmental sciences. Other bachelor's degrees may also be accepted, if the applicant has passed courses equivalent to at least 40 ECTS credits in the fields of mathematics, physics, chemistry, and earth sciences.

## CONTACT

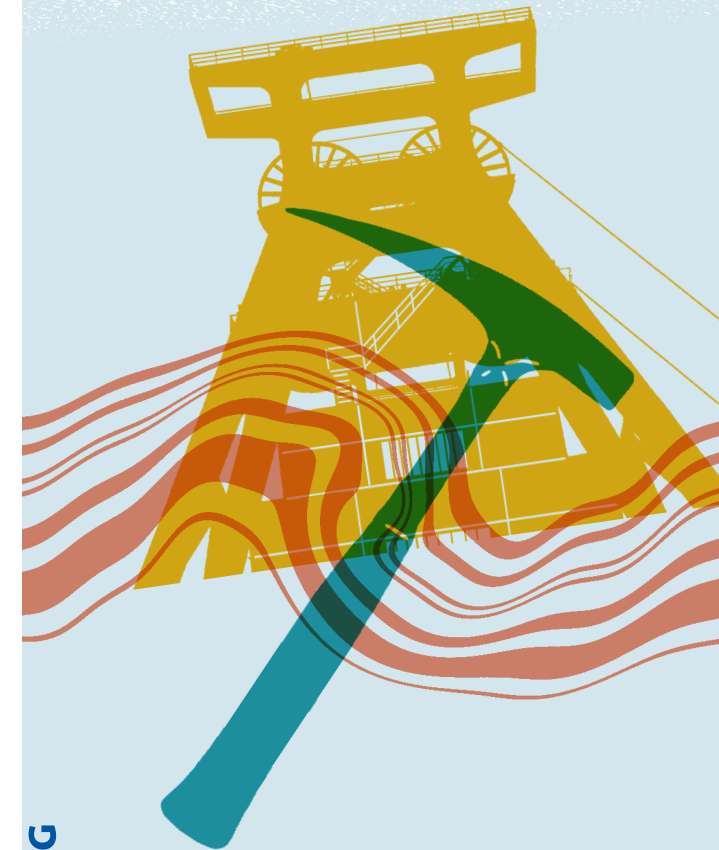
Albert-Ludwig University  
Faculty of Environment and Natural Resources  
Geology

**Dr. Heike Ulmer**

Albertstr. 23b  
79104 Freiburg  
Tel.: +49 (0) 761 203 6480

[ulmer@uni-freiburg.de](mailto:ulmer@uni-freiburg.de)  
[www.master-geo.uni-freiburg.de](http://www.master-geo.uni-freiburg.de)

## M.Sc. Programme GEOLOGY



UNI  
FREIBURG

UNI  
FREIBURG

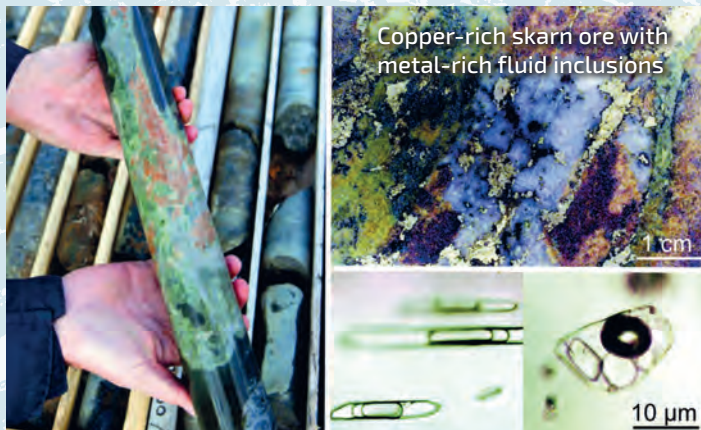
ALBERT-LUDWIG UNIVERSITY OF FREIBURG  
FACULTY OF ENVIRONMENT AND NATURAL RESOURCES



# GEOLOGY PETROLOGY SUB-SURFACE GEOPHYSICS PLANETARY GEOLOGY SEDIMENTOLOGY GEOCHEMISTRY

## M.SC. GEOLOGY

The Master of Science in Geology at the University of Freiburg is a consecutive program, which provides research-oriented education in various fields of Geology. We offer **a combination of a theoretical foundation, geo-data processing, field work, and practical courses** in our laboratories. Teaching includes lectures, seminars, tutorials, workshops, practical sessions, and field work. Our team of highly qualified staff is regularly joined by visiting professors and guest lecturers. Scientific interests of the Freiburg Geosciences cover a wide range of fields: mineralogy and (ore) petrology, experimental petrology, crystalline materials, applied Quaternary geology (with a focus on the impacts of climate change), near surface geophysics, geo-hazards, data analysis and modelling, structural geology, planetary geology, impact crater research, environmental mineralogy and geochemistry.



## CURRICULUM

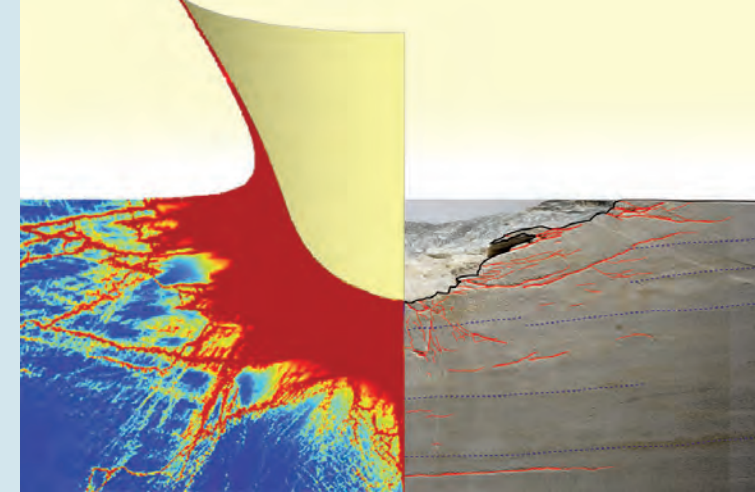
The student has the choice between **four focus areas**:

- » Mineralogy and Geochemistry
- » Geomechanics and Tectonics
- » Geohazards
- » Applied Quaternary Geology

Modules of a **cross-disciplinary curriculum** comprise courses in research methods and geographic information systems, active participation in seminars, invited lectures, and field trips, leading to a broader understanding of modern geological questions, research areas, and solution approaches. The educational profile is completed by selecting **additional courses in the field of geosciences** according to a student's interest. A wide range of activating learning methods is implemented such as application of modern analytical instruments, field methods, solving selected problems by modeling, planning and realization of an individual geological project, ...

## TARGET GROUP

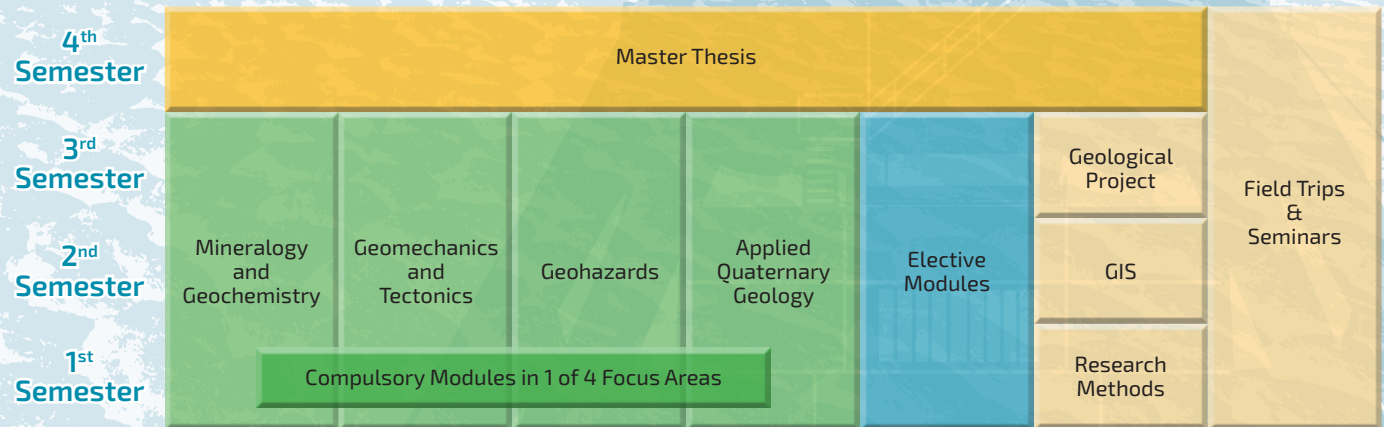
The program is designed for students with a bachelor's degree in the field of earth sciences or environmental sciences who wish to enlarge their knowledge and skills in the field of near-surface processes in geology, petrology geochemistry, environment and sustainable resources management. **A sound basis in geological and petrologic understanding is expected.** Knowledge gaps may be filled by attending B.Sc. courses, but this is limited by the requirement of German language skills.



Modelling meteorite impact processes  
(Model: Museum für Naturkunde Berlin / MEMIN)

## CAREER PERSPECTIVES

The Master of Science (M.Sc.) is an **internationally accredited certificate** that can qualify graduates for positions in research, resource security and supply, geotechnical engineering, environmental remediation and protection, science journalism, geotourism, water supply, foreign aid, materials science, government agencies, museums, ...



Structure of Studies