



Bern-Fribourg Master's in Earth Sciences

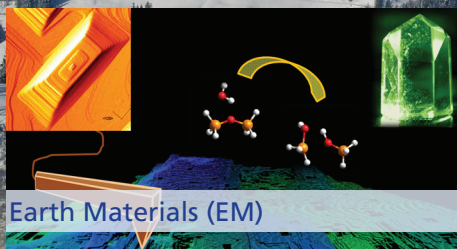
Have your Bachelor studies instilled in you a fascination for Geology? Are you interested in pursuing your studies at the Master's level? Do you wish to train for an exciting career in research or industry? The merger of capabilities at the University of Bern and Fribourg allows an exciting and varied curriculum to be offered in a two-year degree (120 ECTS), taught in English, in a bilingual French and German speaking environment in the heart of Switzerland.

Highlights of the Master's include a choice from 5 specialties. On the website you find interesting courses and Master's theses on a hands-on theme chosen from the broad range of research projects.



Earth and Life Evolution (ELE)

- » Evolution of the geosphere and the biosphere
- » Biogeochemistry
- » Sedimentary environments
- » Hydrocarbon exploration
- » Palaeoecology
- » Geochronology methods
- » Vertebrate Paleontology and Phylogeny



Earth Materials (EM)

- » Material science, mineralogy & crystallography
- » Mineral & rock processing technologies
- » Zeolites, clays cement & ceramics
- » Physico-chemical aspects of mineral genesis and reactivity
- » Fundamental aspects of minerals stability and chemical bonding



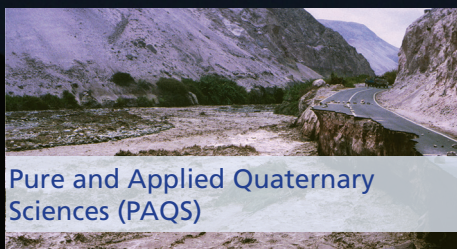
Environmental and Resource Geochemistry (ERG)

- » Groundwater quality
- » Remediation of contaminated sites
- » Deep geological disposal of radioactive wastes
- » CO₂ sequestration
- » Geothermal energy
- » Genesis and exploration of mineral resources
- » Development of secondary resources



Geology (GEOL)

- » Alpine geology
- » Metamorphic and tectonic development of orogens
- » Structures and deformation of rocks
- » Surface processes
- » Geodynamics and seismo-tectonics
- » Geothermal energy
- » Field survey



Pure and Applied Quaternary Sciences (PAQS)

- » Surface processes in orogens and in their forelands
- » Sediments as paleoclimate archives
- » Paleoglaciology
- » Geohazards (mass movements, earthquakes, tsunamis)
- » Engineering geology
- » Human impact on the environment



Bern-Fribourg Master's in Earth Sciences

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| WHO | Any BSc graduate in Earth Sciences from a Swiss or acknowledged university (or equivalent title with min. 60 ECTS Earth Sciences content (see admission procedure)), with a good command of English |
| WHAT | A two year education cycle combining teaching units and an independent research project |
| WHY | To become a professional geologist or as an important step towards an academic career |
| WHERE | A joint program between the Universities of Bern and Fribourg, with field trips in the surroundings, the neighbouring Alps or further away ... |
| WHEN | Program preferably starting in Fall Semester annually (also possible in Spring Semester upon individual agreement) |
| HOW | Are you interested? Then, please contact one of the student advisors for further information and fill in the admission/registration request form! |

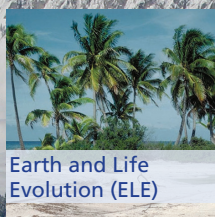
Curriculum

The Universities of Bern and Fribourg offer an MSc degree in Earth Sciences. One of the following five special qualifications within this program may be chosen:

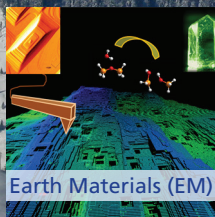
- Earth and Life Evolution
- Earth Materials
- Environmental & Resource Geochemistry
- Geology
- Pure and Applied Quaternary Science

All MSc candidates complete a course module entitled Dynamic Alps, which serves as a common basis for all the specialties and some Soft Skill courses (6 ECTS). Each specialty consists of a set of mandatory courses (30 ECTS), a set of elective courses (28 ECTS) and a thesis project (60 ECTS). Thesis work is spread over all 4 semesters of the degree program and the topic of the thesis lies within the chosen specialty.

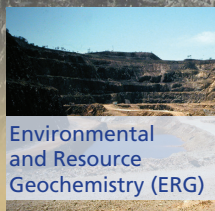
The Bern-Fribourg Master's in Earth Sciences is a joint program run by the Institute of Geological Sciences at the University of Bern and the Department of Geosciences at the University of Fribourg.



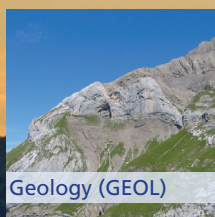
Earth and Life Evolution (ELE)



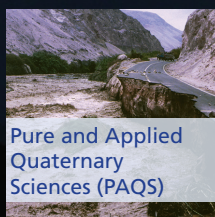
Earth Materials (EM)



Environmental and Resource Geochemistry (ERG)



Geology (GEOL)



Pure and Applied Quaternary Sciences (PAQS)