



Bern-Fribourg Master in Earth Sciences



Curriculum

The Universities of Bern and Fribourg offer an MSc degree in Earth Sciences. One of the following five special qualifications within this programme 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. Each speciality consists of a set of mandatory courses, a set of elective courses and a thesis project. Thesis work is spread over all 4 semesters of the degree programme and the topic of the thesis lies within the chosen speciality.

Special qualifications

Earth and Life Evolution	The evolution of the geosphere and that of the biosphere – linked by a common theme: the processes and the unique history that have produced our life-sustaining planet.
Earth Materials:	Selected topics in mineralogy and petrology, both pure and applied aspects, e.g. properties and uses of clay minerals, zeolites in nature and industry, stability of minerals.
Environmental & Resource Geochemistry:	Processes of rock–water interaction relevant to groundwater quality, remediation of contaminated sites, deep geological disposal of radioactive and toxic wastes, genesis and exploration of mineral resources, and development of secondary resources.
Geology:	Structures and deformation of the lithosphere and of rocks, including the metamorphic and tectonic development of orogens, interaction between Earth internal and surface processes.
Pure and Applied Quaternary Science	Surface processes in orogens and in their forelands, glaciology, paleoclimate research, dating, humans as geological agents, engineering geology.

Weighting of modules

	Modul A	Modul B	Modul C	Modul D
	Mandatory Courses	Specialty Courses	Elective Courses	Research Thesis
1st semester	6 EC	↑	↑	↑
2nd semester				
3rd semester		30 EC	24 EC	60 EC
4th semester		↓	↓	↓

Eligibility and Fees

Students with a university-level BSc in Earth Sciences are eligible for the MSc degree. Students with a BSc in a related field (e.g. physical geography, physics, chemistry, biology) may also be eligible, depending on the specific curriculum covered in their BSc coursework.

Fees (for the entire MSc course)  
 Bern: CHF 2720.- ; Fribourg: CHF 2620.- for Swiss students, 3220.- for foreign students

BeFri is the acronym for the cooperative research and teaching network between the Universities of Bern and Fribourg.

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