

Module B

Core Courses for the Specialization Geology (GEOL)

1:23:52 Uhr Samstag, 17. Mai 2025

(will be updated continuously)

sorted by semester and frequency Courses title (47 courses)

Courses	all semesters or unassigned	ECTS	Lecturers	Uni (held in)	Frequency	Year	Sem.	Speciality
Electron Microprobe Analysis - EMPA: Practical course (prer)		1	FPI	BE	annually in fall and spring			ELE, EM, ERG, GEOL, PAQS
Electron microbeam techniques (laboratory)		1	ES/CN	FR	on request			ELE, EM, ERG, GEOL, PAQS
Scanning Electron Microscopy (SEM): Practical course. (Bern) on request (prer)		1	AB	BE	on request			ELE, EM, ERG, GEOL, PAQS

Courses	Fall Semester HS	ECTS	Lecturers	Uni (held in)	Frequency	Year	Sem.	Speciality
Alpine Cryosphere		3	FRHöl	FR	annually in fall		HS	GEOL, PAQS
Basic Computer Programming for Geosciences		2	PL/JHE	BE	annually in fall		HS	EM, ERG, GEOL, PAQS
Geo-Information Systems. Lecture and practical		3	/MaiD	BE	annually in fall		HS	GEOL, PAQS
Hazards, risks and vulnerability		3	FRDel	FR	annually in fall		HS	GEOL, PAQS
Introduction to 3D Geological Modelling		1.5	FM/EKU	BE	annually in fall		HS	GEOL
Introduction to Object-Oriented Programming (OOP): Python		2	MW	BE	annually in fall		HS	ELE, EM, ERG, GEOL, PAQS
Reflected-Light Microscopy		1.5	MJ	BE	annually in fall		HS	EM, ERG, GEOL
Basement evolution in orogens		2	AB	BE	biennially in fall	even	HS	GEOL
Basin Evolution		3	FS/JM/GS	BE/FR	biennially in fall	even	HS	GEOL
Glacial Geology Field Course		3	NA	BE	biennially in fall	even	HS	GEOL, PAQS
Hydrothermal processes in oceanic settings		3	ES	FR	biennially in fall	even	HS	ELE, EM, ERG, GEOL
Marine Geology		3	AF/ES/AR	FR	biennially in fall	even	HS	ELE, GEOL, PAQS
Natural Hazards: Process & Methods		3	MKe/FA	BE	biennially in fall	even	HS	GEOL, PAQS
Rock Deformation: Brittle regime (prer)		2.5	MH/GS/JM	BE	biennially in fall	even	HS	EM, ERG, GEOL, PAQS
		3	MAN	BE	biennially in fall	odd	HS	ELE, EM, ERG, GEOL, PAQS
A habitable future? Applications of Environmental Geochemistry		3	aha	BE	biennially in fall	odd	HS	ELE, EM, ERG, GEOL
Deep Mantle Properties and Geochemistry		3	sut	BE	biennially in fall	odd	HS	ELE, EM, GEOL
Fluid-solid interactions and diagenesis: processes and sustainable applications		5	AF/ES/ML	FR	biennially in fall	odd	HS	ELE, EM, ERG, GEOL
Ophiolites: Production and destruction of oceanic crust		2.5	JHe	BE	biennially in fall	odd	HS	EM, ERG, GEOL
Rock Deformation: Ductile regime		4	MH/GS/AB	BE	biennially in fall	odd	HS	EM, GEOL
Sedimentology of Glaciofluvial Deposits		1.5	NA	BE	biennially in fall	odd	HS	GEOL, PAQS

Courses	Spring Semester FS	ECTS	Lecturers	Uni (held in)	Frequency	Year	Sem.	Speciality
Applied Geophysical Methods		3	FRHau	FR	annually in spring		FS	GEOL, PAQS
Electron Beam Microanalytics: Theory - EMPA, SEM, CL		2	PL/AB/BG	BE	annually in spring		FS	ELE, EM, ERG, GEOL, PAQS
European Mars Rover Challenge - geological support team		3	aza/jhe	BE	annually in spring		FS	ELE, GEOL
Glacial Geology		3	NA	BE	annually in spring		FS	GEOL, PAQS
Interpretation of Seismic Profiles around the world		1.5	ASO	FR	annually in spring		FS	GEOL, PAQS
Interpretation of Seismic Profiles in the Alpine foreland		1.5	ASO	FR	annually in spring		FS	GEOL, PAQS
Laser-ablation inductively-coupled-plasma mass-spectrometry - LA-ICP-MS. Two days short		1	TP	BE	annually in spring		FS	ELE, EM, ERG, GEOL, PAQS
Modelling of glaciers and permafrost		3	FRHöl	FR	annually in spring		FS	GEOL, PAQS
Mountain Geomorphology		3	FRDel	FR	annually in spring		FS	GEOL, PAQS
Using small drones for geoscientific applications		1	MaiD	BE	annually in spring		FS	ELE, EM, ERG, GEOL, PAQS
Advanced Carbonate Sedimentology		2.5	AF	FR	biennially in spring	even	FS	ELE, GEOL
Field Logging of Tunnels and Boreholes		2.5	UM/MM/MH	BE	biennially in spring	even	FS	ERG, GEOL, PAQS
Field Trip: Oceanic Lithosphere and subducted equivalents (Liguria)		2.5	TP	BE	biennially in spring	even	FS	EM, ERG, GEOL
Fossil Lagerstaetten of Southern Germany		2.5	WJ	FR	biennially in spring	even	FS	ELE, GEOL
Noerdlinger Ries Excursion		2.5	BH/TBu	BE	biennially in spring	even	FS	ELE, GEOL
Surface Processes, Geomorphology (prer)		3	FS	BE	biennially in spring	even	FS	GEOL, PAQS
Accessory Minerals		2.5	DaR	BE	biennially in spring	odd	FS	EM, GEOL
Applied Sedimentology		3	AF/AFa/FS	FR	biennially in spring	odd	FS	GEOL, PAQS
(Climate-)Stratigraphy and Natural Hazards Field Course in the Italian Apennine		2.5	/HV	BE	biennially in spring	odd	FS	ELE, GEOL, PAQS
Excursion: From basins to mountain belts (prer)		2	FS/MH/JM/GS/AB	BE	biennially in spring	odd	FS	GEOL
Field Course Rock Deformation: Brittle Regime		1.5	MH/JM/GS	BE	biennially in spring	odd	FS	GEOL
Geostatistics		2	GK	BE	biennially in spring	odd	FS	ELE, EM, ERG, GEOL, PAQS
Mountain building processes		3	MH/JM/GS	BE	biennially in spring	odd	FS	GEOL

red courses: new or changed courses
 ,prer": Prerequisite courses necessary

114.5
 Total ECTS