

## Module B

### Core Courses for the Speciality Earth Materials (EM)

1:22:42 Uhr Samstag, 22. Januar 2022

(will be updated continuously)

sorted by semester and frequency Courses title (37 courses)

Courses	all semesters or unassigned	ECTS	Lecturers	Uni (held in)	Frequency	Year	Sem.	Speciality
Electron Microprobe Analysis - EMPA: Practical course (prer)		1	MR	BE	annually in fall and spring			EM, ERG
Internship in industry		5		BE	annually in fall and spring			ELE, EM, ERG, GEOL, PAQS
Cathodoluminescence Microscopy CL: Practical course (prer)		0.5	AB	BE	on request			EM
Scanning Electron Microscopy -SEM: Practical course. (Fribourg) (prer)		1	BG/CN	FR	on request			EM, ERG
Scanning Electron Microscopy (SEM): Practical course. (Bern) on request (prer)		1	AB	BE	on request			EM, ERG

Courses	Fall Semester HS	ECTS	Lecturers	Uni (held in)	Frequency	Year	Sem.	Speciality
Advanced Computer Programming for Geosciences		2	PL/JHE	BE	annually in fall		HS	EM, ERG, PAQS
Basic Computer Programming for Geosciences		2	PL/JHE	BE	annually in fall		HS	EM
Geochemical Analysis of Rocks. Four-day block course		2	NW/UE	BE	annually in fall		HS	EM, ERG
Natural Zeolites		2	GC	BE	annually in fall		HS	EM, ERG
Reflected-Light Microscopy		1.5	BH	BE	annually in fall		HS	EM, ERG, GEOL
Technical Mineralogy		3	BG	FR	annually in fall		HS	EM
Rock Deformation: Brittle regime (prer)		2.5	MH/GS/JM	BE	biennially in fall	even	HS	EM, ERG, GEOL, PAQS
Volcanology		3	BG	FR	biennially in fall	even	HS	EM, GEOL
Waste Materials & Circular Economy		1.5	gw	BE	biennially in fall	even	HS	EM, ERG
Atomistic simulations of fluids and solids		2.5	SCh	BE	biennially in fall	odd	HS	EM, ERG
Environmental Mineralogy		2.5	BG	FR	biennially in fall	odd	HS	EM
Geological Disposal and Remediation of Non-Radioactive Waste		1.5	LD/NW/UE	BE	biennially in fall	odd	HS	EM, ERG
Low Temperature Isotope Geochemistry		3	TN/NW	BE	biennially in fall	odd	HS	ELE, EM, ERG
Mineral Resources. Lecture and Practical		2.25	LD/TP	BE	biennially in fall	odd	HS	EM, ERG
Ophiolites: Production and destruction of oceanic crust		2.5	JHe	BE	biennially in fall	odd	HS	EM, GEOL
Rock Deformation: Ductile regime		4	MH/GS/AB	BE	biennially in fall	odd	HS	EM, GEOL

Courses	Spring Semester FS	ECTS	Lecturers	Uni (held in)	Frequency	Year	Sem.	Speciality
Contaminated Sites		2	BG/PHo/CKE/RPH	FR	annually in spring		FS	EM
Electron Beam Microanalytics: Theory - EMPA, SEM, TEM CL		2	PL/AB/BG	BE	annually in spring		FS	EM, ERG
Electron Microbeam Techniques, Laboratory (prer)		1	BG/CN	FR	annually in spring		FS	EM
From Waste to Resources - and the Challenges in between (Excursion)		1	GW/DVH	BE/FR	annually in spring		FS	EM, ERG, PAQS
Laser-ablation inductively-coupled-plasma mass-spectrometry - LA-ICP-MS.		1	TP	BE	annually in spring		FS	ELE, EM, ERG, GEOL, PAQS
Rock and Paleomagnetism		2	BAN	BE	annually in spring		FS	ELE, EM, ERG, GEOL, PAQS
Single Crystal X-ray Diffraction. Short course. Upon request. (prer)		1.5	GC	BE	annually in spring		FS	EM
X-Ray Powder Diffraction. Three-day short course.		1.5	UE	BE	annually in spring		FS	EM, ERG
Applied geochemistry and thermodynamic modelling of cement hydration		1.5	BLo	BE	biennially in spring	even	FS	EM, ERG
Cements and Silicate ceramics		2.5	BG	FR	biennially in spring	even	FS	EM
Methods of Mass Spectrometry. Short Courses. Upon request (prer)		2.5	TN/IV//TP	BE	biennially in spring	even	FS	ELE, EM, ERG
Accessory Minerals		2.5	DaR	BE	biennially in spring	odd	FS	EM
Excursion Volcanology		2.5	BG	FR	biennially in spring	odd	FS	EM, ERG, GEOL
Geological Disposal of Radioactive Waste		2.5	MM/EC	BE	biennially in spring	odd	FS	EM, ERG
Geostatistics		2	GK	BE	biennially in spring	odd	FS	ELE, EM, ERG, GEOL, PAQS
Mineral Surface Characterization by Atomic Force Microscopy (AFM)		1.5	SCh	BE	biennially in spring	odd	FS	EM, ERG

red courses: new or changed courses  
 „prer“: Prerequisite courses necessary

75.75  
 Total ECTS