

Module B

Core Courses for the Speciality Environmental & Resource Geochemistry (ERG)

1:23:55 Uhr Donnerstag, 26. Mai 2022

(will be updated continuously)

sorted by semester and frequency Courses title (34 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
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
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
Aqueous Environmental Geochemistry		2.5	UM	BE	biennially in fall	even	HS	ERG
Diagenesis of Sediments		3	AF/NA	BE	biennially in fall	even	HS	ELE, ERG, PAQS
Fluids in the Crust		2.25	LD/MM/TP/TG	BE	biennially in fall	even	HS	ERG
Geochemical Modelling I. : Equilibrium Approach	(prer)	2.5	UM/NW	BE	biennially in fall	even	HS	ERG
Groundwater Sampling and Analysis		1.5	PW/NW/CWA	BE	biennially in fall	even	HS	ERG
Rock Deformation: Brittle regime	(prer)	2.5	MH/GS/JM	BE	biennially in fall	even	HS	EM, ERG, GEOL, PAQS
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
Fluid Inclusions		2	LD/TP	BE	biennially in fall	odd	HS	ERG
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

Courses	Spring Semester FS	ECTS	Lecturers	Uni (held in)	Frequency	Year	Sem.	Speciality
Electron Beam Microanalytics: Theory - EMPA, SEM, TEM CL		2	PL/AB/BG	BE	annually in spring		FS	EM, ERG
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
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
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	ERG, GEOL
Methods of Mass Spectrometry. Short Courses. Upon request	(prer)	2.5	TN/IV//TP	BE	biennially in spring	even	FS	ELE, EM, ERG
Excursion Volcanology		2.5	BG	FR	biennially in spring	odd	FS	EM, ERG, GEOL
Geochemical Modelling II: Reactive-Transport Modelling	(prer)	2.25	PA/TG/LD	BE	biennially in spring	odd	FS	ERG
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
Mapping of Rock Alteration and Permeable Structures		3	LD/TP	BE	biennially in spring	odd	FS	ERG
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

67.75

Total ECTS