

Study plan MSc "Geoscience" with focus "Petrology and Geochemistry"

Additional requirements for incoming students	CP	Sem.	Weekly hours	Comment	recommended semester
Geochemistry/Geochemie	3	WS	2	BSc course (in English); LV# 176518	1st semester
Mandatory modules					
Igneous petrology	10				
Petrology of igneous rocks		WS	2		1st semester
Thin section exercises with igneous rocks		WS	2		
Numerical exercises w. data from igneous rocks		WS	2		
Basics in Petrology	6				1st semester; Module is optional for students without documented courses "Baumaterial"
Mineralogy		WS	2		
Optical mineralogy		WS	2		
Thermodynamics	6				2nd semester
Principles of elementary thermodynamics		SS	2		
Solution phase thermodynamics		SS	2		
Recommended modules	CP	Sem.	Weekly hours	Comment	recommended semester
High-temperature geochemistry	6				2nd or 4th semester
High-temperature geochemistry (lecture)		SS	2		
High-temperature geochemistry (exercise)		SS	2		
Metamorphic petrology	12				2nd semester
Petrology of metamorphic rocks		SS	2		
Thin section exercises with metamorphic rocks		SS	2		
Numerical exercises w. data from metam. rocks		SS	2		
THERMOCALC course		SS	1	Block course in July or August (3 days)	
Geochemical analyses by Laser-Ablation ICP mass spectrometry	5				3rd semester
Methods of LA-ICP-MS		WS	2		
Practical course in LA-ICP-MS		WS	2	Block course in February or March	
Electron beam microanalyses	6				2nd or 4th semester
Electron beam microanalyses (lecture)		SS	2		
Electron beam microanalyses (practical)		SS	2		
Field course in tectonics and resources	10				2nd or 4th semester; not offered every year
Pre-field course seminar		SS	1		
Field course		SS	10 days	costs of around 600 €	
Sedimentary geochemistry	10				1st or 3rd semester
Isotope geochemistry Principles and applications		WS	2		
Laboratory course isotope geochemistry		WS	4	Two-week block course in February/March	
MSc thesis	30				