GEW-MC08 Advanced Mineralogy-Petrology	Number of credit points (LP): 12
Module type (mandatory or elective module)	Elective module
Contents and qualification objectives of the module	**Contents** In-depth fundamentals, methods, and tools based on important areas of mineralogy, petrology, and geochemistry, such as properties and structures of crystalline and non-crystalline matter, thermodynamics, kinetics, phase analysis, igneous and metamorphic petrology, evaluation and computation of geochemical data (e.g., major and trace elements and isotope ratios), and applied crystal chemistry. **Qualification goals** Students - deepen their knowledge of mineralogical, petrological and geochemical basics - deepen their knowledge of geomaterials in complex processes in the earth system and learn to analyze and apply data and models - learn and deepen conceptual and methodological approaches to the description, investigation and analysis of different mineralogical-petrological issues in the geoscientific context
Module examination (number, form, scope)	One exam of the following forms Written exam, 90-120 minutes. Oral exam,30-45 minutes Term paper, 20-25 pages
Self-learning time (in time hours)	240

Events (teaching forms)	Contact time (in semester hours)	Secondary examination (number, form, scope)		Partial module examination accompanying the course (number, form, scope)
		For the completion of the module	For admission to the module examination	
Lecture and exercise I (lecture and exercise)	1V+1T	-	-	-
Lecture and exercise II (lecture and exercise)	1V+1T	-	-	-
Lecture and exercise III (lecture and exercise)	1V+1T	-	-	-
Lecture and exercise IV (lecture and exercise)	1V+1T	-	-	-

Frequency	Winter semester (I and II) and summer semester (III and IV)
Prerequisite for participation in the module	None
Teaching unit(s)	Geosciences