GEW-MF13 Applied Geophysical Methods I	Number of credit points (LP): 12
Module type (mandatory or elective module)	Advanced module
Contents and qualification objectives of the module	**Contents** In addition to the theoretical and physical fundamentals, this course presents various seismic and potential methods for subsurface exploration. Data acquisition, data processing and interpretation of the respective results will be discussed. In the block course (field and computer exercise) following the lecture parts, the treated methods are applied in the field and the acquired data are evaluated using computer programs. **Qualification goals** Students - acquire in-depth knowledge of the physical principles of geophysical methods and in particular of active seismic and common potential methods (gravimetry and magnetics) - learn the professional use of these methods to explore the subsurface for different geoscientific questions and on different spatial scales - are able to analyze and interpret seismic observations and potential field data data recorded in the field and transfer them into geoscientific model concepts
Module examination (number, form, scope)	An examination of the following forms: Portfolio examination, consisting of: Report (15-20 pages) and corresponding presentation (20-30 minutes). Written exam, 90-120 minutes oral exam, 30-45 minutes
Self-learning time (in time hours)	192

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)	2V+2T	-	-	-
Block Course I (course)	Supervised 24 h	-	-	-
Lecture and exercise II (lecture and exercise)	2V+2T	-	-	-
Block course II (course)	Supervised 24 h	-	-	-

Frequency	Winter semester (V+T I+K I) and summer semester (V+T II+K II)
Prerequisite for participation in the module	None
Teaching unit(s)	Geosciences