

GEW-MF14 Applied Geophysical Methods II		Number of credit points (LP): 12		
Module type (mandatory or elective module)	Advanced module			
Contents and qualification objectives of the module	Contents In this module, the most common methods of DC geoelectrics and electromagnetics (including georadar) are covered. The physical basics of the individual methods are worked out, methodological basics of data acquisition and processing are dealt with, and typical applications of the individual methods are presented. In the field exercise part, the learned methods are also applied together with other methods of geophysics (such as magnetics or seismics) in the field, which also includes the evaluation and interpretation of all data. Qualification goals Students <ul style="list-style-type: none">- acquire in-depth knowledge of the physical principles of geophysical methods and in particular electrical and electromagnetic methods- learn the professional, also practical use of these methods for the exploration of the subsurface for different geoscientific questions and on different spatial scales- are able to analyze and interpret various electrical and electromagnetic data, which they have also recorded independently in the field, and transfer them to geoscientific model concepts			
Module examination (number, form, scope)	An examination of the following forms: Portfolio examination, consisting of: Report (15-20 pages) and associated presentation (20-30 minutes) on the results of a project. Oral exam, 30-45 minutes Written exam, 90-120 minutes			
Self-learning time (in time hours)	200			
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 (lecture and exercise)	2V+2T	-	-	-
Terrain work (exercise)	Supervision: 50 h	-	-	-
Data evaluation (exercise)	Supervision: 50 h	-	-	-
Frequency		Winter semester and summer Semester (over two semesters, start Winter semester)		
Prerequisite for participation in the module		None		
Teaching unit(s)		Geosciences		