

**Master - Studium: Geosciences and Environment**

	SWS	LP	AZ
Aufbaumodule 1. Semester	18 +180 h "personal profiling module"	30	900
Aufbaumodule 2. Semester	18 + 180 h (4,5 Wochen) "geoscientific mapping"	30	900
Aufbaumodule 3. Semester	12 + integrativ "geoscientific mapping" (180 h) + integrativ "master thesis" (240 h)	30	900
Aufbaumodule 4. Semester	6 + integrativ "master thesis" (660 h)	30	900
<b>Summe</b>	<b>54</b>	<b>120</b>	<b>3600</b>

SWS: Semesterwochenstunden  
 LP: Leistungspunkte (ECTS)  
 AZ: Arbeitszeit (workload)  
 WS: Wintersemester  
 SS: Sommersemester

1. Semester

		SWS	LP	AZ
Modul <b>"soil and landscapes"</b>				
soil geography	V	2		
	Ü	2		
landscape ecology	V	2	8	240
Modul <b>"advanced geodynamics"</b>				
geodynamics and tectogenesis	V	2		
regional geology	V	1		
sedimentary basins	V	2		
	Ü	1	8	240
Modul <b>"environmental chemistry"</b>				
environmental chemistry & environmental analytics	V	2		
age dating by isotopes	V	1		
chemical balances	V	1		
physical chemistry	V	2	8	240
Modul <b>"sustainable management of georesources"</b>				
sustainable applications of mineral raw material	V	2		
mineral raw material & waste management	V	2		
properties of mineral raw material (experimental approach)	Ü	2	8	240
Modul <b>"oceanography and coastal management"</b>				
oceanography	V	2		
coastal zone management	V	2		
	Ü	2	8	240
Modul <b>"quantitative methods in earthsciences"</b>				
advanced geostatistics/ uncertainty assessment	V	1		
	Ü	1		
spatiotemporal modeling of geological processes	V	1		
	Ü	1		
multivariate statistics in geosciences	V	1		
	Ü	1	8	240
Modul <b>"paleoecology"</b>				
historical geology	V	3		
micropaleontology	Ü	3	8	240
Modul <b>"economic geology of elemental raw material"</b>				
economic geology of ore and salt raw material	V	2		
	Ü	1		
economic geology of energy raw material	V	2		
	Ü	1	8	240
Modul <b>"mobility module"</b>			8	240
Modul <b>"personal profiling module"</b>			6	180
Auswahl 3 Module		3 x 6 = 18	3 x 8 = 24	720
"personal profiling module"			1 x 6 = 6	180
Summe		18	30	900

2. Semester

		SWS	LP	AZ
Modul <b>"paleontology"</b>				
systematic of invertebrates	V Ü	2 2		
ecology and biostratification	V	2	8	240
Modul <b>"applied geophysics"</b>				
potential methods	V Ü	1 1		
electromagnetics	V Ü	2 1		
seismic methods	V	1	8	240
Modul <b>"geology of petroleum and natural gas"</b>				
origin and regional distribution of hydrocarbons	V Ü	1 1		
prospection of hydrocarbons	V	1		
exploration and recovery of hydrocarbons	V Ü	2 1		
			8	240
Modul <b>"environmental hydrogeology"</b>				
subsurface water processes	V Ü	3 2		
rehabilitation measures for groundwater and soil	V	1	8	240
Modul <b>"economic geology in unconsolidated rocks"</b>				
economic geology of rocks & loose rocks	V	2		
clay & soil mineralogy	V Ü	2 2		
			8	240
Modul <b>"sustainability"</b>				
sustainability	V	2		
history, social & economic impact	V	2		
natural Conservation	V	2	8	240
Modul <b>"sedimentology in quaternary environment"</b>				
sedimentary depositional environments	V	2		
regional quaternary geology and coastal processes	V Ü	2 2		
			8	240
Modul <b>"training in laboratory practice"</b>				
geoscientific analysis	V	2		
preparation	Ü	2		
data acquisition and analysis	Ü	2	8	240
Modul <b>"mobility module"</b>			8	240
Modul <b>"geoscientific mapping"</b>		4,5 Wochen	6	180
Auswahl 3 bisher noch nicht belegte Module "geoscientific mapping"		3 x 6 = 18	3 x 8 = 24 1 x 6 = 6	720 180
Summe		18	30	900

3. Semester

		SWS	LP	AZ
Modul <b>"soil and landscapes"</b>				
soil geography	V	2		
	Ü	2		
landscape ecology	V	2	8	240
Modul <b>"advanced geodynamics"</b>				
geodynamics and tectogenesis	V	2		
regional geology	V	1		
sedimentary basins	V	2		
	Ü	1	8	240
Modul <b>"environmental chemistry"</b>				
environmental chemistry & environmental analytics	V	2		
age dating by isotopes	V	1		
chemical balances	V	1		
physical chemistry	V	2	8	240
Modul <b>"sustainable management of georesources"</b>				
sustainable applications of mineral raw material	V	2		
mineral raw material & waste management	V	2		
properties of mineral raw material (experimental approach)	Ü	2	8	240
Modul <b>"oceanography and coastal management"</b>				
oceanography	V	2		
coastal zone management	V	2		
	Ü	2	8	240
Modul <b>"quantitative methods in earthsciences"</b>				
advanced geostatistics/ uncertainty assessment	V	1		
	Ü	1		
spatiotemporal modeling of geological processes	V	1		
	Ü	1		
multivariate statistics in geosciences	V	1		
	Ü	1	8	240
Modul <b>"paleoecology"</b>				
historical geology	V	3		
micropaleontology	Ü	3	8	240
Modul <b>"economic geology of elemental raw material"</b>				
economic geology of ore and salt raw material	V	2		
	Ü	1		
economic geology of energy raw material	V	2		
	Ü	1	8	240
Modul <b>"mobility module"</b>			8	240
Modul <b>"geoscientific mapping"</b>		integrativ	6	180
Modul <b>"master thesis"</b>		integrativ	8	240
Auswahl 2 bisher noch nicht belegte Module		2 x 6 = 12	2 x 8 = 16	480
"geoscientific mapping"			1 x 6 = 6	180
"master thesis"			1 x 8 = 8	240
Summe		12	30	900

4. Semester

		SWS	LP	AZ
Modul <b>"paleontology"</b>				
systematic of invertebrates	V	2		
	Ü	2		
ecology and biostratification	V	2	8	240
Modul <b>"applied geophysics"</b>				
potential methods	V	1		
	Ü	1		
electromagnetics	V	2		
	Ü	1		
seismic methods	V	1	8	240
Modul <b>"geology of petroleum and natural gas"</b>				
origin and regional distribution of hydrocarbons	V	1		
	Ü	1		
prospection of hydrocarbons	V	1		
exploration and recovery of hydrocarbons	V	2		
	Ü	1	8	240
Modul <b>"environmental hydrogeology"</b>				
subsurface water processes	V	3		
	Ü	2		
rehabilitation measures for groundwater and soil	V	1	8	240
Modul <b>"economic geology in unconsolidated rocks"</b>				
economic geology of rocks & loose rocks	V	2		
	Ü	1		
clay & soil mineralogy	V	2		
	Ü	1	8	240
Modul <b>"sustainability"</b>				
sustainability	V	2		
history, social & economic impact	V	2		
natural Conservation	V	2	8	240
Modul <b>"sedimentology in quaternary environment"</b>				
sedimentary depositional environments	V	2		
regional quaternary geology and coastal processes	V	2		
	Ü	2	8	240
Modul <b>"master thesis"</b>		integrativ	22	660
Auswahl eines bisher noch nicht belegten Modules		1 x 6 = 6	1 x 8 = 8	240
"master thesis"			22	660
<b>Summe</b>		<b>6</b>	<b>30</b>	<b>900</b>

## Studiungsverlaufsplan

Master of Geosciences and Environment

1. Semester	Aufbaumodul 6 SWS 8 LP AZ: 240 h	Aufbaumodul 6 SWS 8 LP AZ: 240 h	Aufbaumodul 6 SWS 8 LP AZ: 240 h	"personal profiling module" 6 LP AZ: 180 h
2. Semester	Aufbaumodul 6 SWS 8 LP AZ: 240 h	Aufbaumodul 6 SWS 8 LP AZ: 240 h	Aufbaumodul 6 SWS 8 LP AZ: 240 h	"geoscientific mapping" 6 LP AZ: 180 h
3. Semester	Aufbaumodul 6 SWS 8 LP AZ: 240 h	Aufbaumodul 6 SWS 8 LP AZ: 240 h	"master thesis" 8 LP AZ: 240 h	"geoscientific mapping" 6 LP AZ: 180 h
4. Semester	Aufbaumodul 6 SWS 8 LP AZ: 240 h	"master thesis" 22 LP AZ: 660 h		

		SWS	LP	AZ
Modul <b>"soil and landscapes" (WS)</b>				
soil geography	V	2		
	Ü	2		
landscape ecology	V	2	8	240
Modul <b>"advanced geodynamics" (WS)</b>				
geodynamics and tectogenesis	V	2		
regional geology	V	1		
sedimentary basins	V	2		
	Ü	1	8	240
Modul <b>"environmental chemistry" (WS)</b>				
environmental chemistry & environmental analytics	V	2		
age dating by isotopes	V	1		
chemical balances	V	1		
physical chemistry	V	2	8	240
Modul <b>"sustainable management of georesources" (WS)</b>				
sustainable applications of mineral raw material	V	2		
mineral raw material & waste management	V	2		
properties of mineral raw material (experimental approach)	Ü	2	8	240
Modul <b>"oceanography and coastal management" (WS)</b>				
oceanography	V	2		
coastal zone management	V	2		
	Ü	2	8	240
Modul <b>"quantitative methods in earthsciences" (WS)</b>				
advanced geostatistics/ uncertainty assessment	V	1		
	Ü	1		
spatiotemporal modeling of geological processes	V	1		
	Ü	1		
multivariate statistics in geosciences	V	1		
	Ü	1	8	240
Modul <b>"paleoecology" (WS)</b>				
historical geology	V	3		
micropaleontology	Ü	3	8	240
Modul <b>"economic geology of elemental raw material" (WS)</b>				
economic geology of ore and salt raw material	V	2		
	Ü	1		
economic geology of energy raw material	V	2		
	Ü	1	8	240
Modul <b>"personal profiling module" (WS)</b>			6	180

Modul <b>"paleontology" (SS)</b>				
systematic of invertebrates	V	2		
	Ü	2		
ecology and biostratification	V	2	8	240
Modul <b>"applied geophysics" (SS)</b>				
potential methods	V	1		
	Ü	1		
electromagnetics	V	2		
	Ü	1		
seismic methods	V	1	8	240
Modul <b>"geology of petroleum and natural gas" (SS)</b>				
origin and regional distribution of hydrocarbons	V	1		
	Ü	1		
prospection of hydrocarbons	V	1		
exploration and recovery of hydrocarbons	V	2		
	Ü	1	8	240
Modul <b>"environmental hydrogeology" (SS)</b>				
subsurface water processes	V	3		
	Ü	2		
rehabilitation measures for groundwater and soil	V	1	8	240
Modul <b>"economic geology in unconsolidated rocks" (SS)</b>				
economic geology of rocks & loose rocks	V	2		
clay & soil mineralogy	V	2		
	Ü	2	8	240
Modul <b>"sustainability" (SS)</b>				
sustainability	V	2		
history, social & economic impact	V	2		
natural Conservation	V	2	8	240
Modul <b>"sedimentology in quaternary environment" (SS)</b>				
sedimentary depositional environments	V	2		
regional quaternary geology and coastal processes	V	2		
	Ü	2	8	240
Modul <b>"training in laboratory practice" (SS)</b>				
geoscientific analysis	V	2		
preparation	Ü	2		
data acquisition and analysis	Ü	2	8	240
Modul <b>"mobility module" (WS/SS)</b>			8	240
Modul <b>"geoscientific mapping" (WS/SS)</b>			12	360
Modul <b>"master thesis" (WS/SS)</b>			30	900