Course of Study Water and Environmental Engineering (Study Cohort w14)

Sample course plan C Master Water and Environmental Engineering (WUMS)
Specialisation Water

Legend

Core qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
Core qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

LP	Semester 1	Form	Hrs/wk	Semester 2	Form	Hrs/wk	Semester 3	Form	Hrs/wk	Semester 4	Form	Hrs/wk
1	**Biology, Geology and Chemistry**			**Modeling in Water Management**			**Project Work Water/ Waste Water**			**Master Thesis**		
2	Environmental Analysis	VL	2	Applied Groundwater Modeling	VL	1						
3	Geology and Soil Science	VL	2	Applied Groundwater Modeling	UE	2						
4	Biology WUMS	VL	2	Modeling of Water Supply and Sewer Network	PBL	2						
5												
6												
7	**Sustainability and Risk Management**			**Management of Surface Water**			**Membrane Technology**					
8	Environment and Sustainability	VL	2	Modelling of Flow in Rivers and Estuaries	VL	3	Membrane Technology	VL	2			
9	Safety, Reliability and Risk Assessment	SE	2	Nature-Oriented Hydraulic Engineering / Integrated Flood Protection	PBL	2	Membrane Technology	UE	1			
10							Membrane Technology	PR	1			
11												
12												
13	**Water Protection**			**Wastewater Systems**			**Process Modeling in Water Technology**					
14	Water Protection and Wastewater Management	VL	2	Advanced Wastewater Treatment	VL	2	Process Modeling in Drinking Water Treatment	PBL	2			
15				Advanced Wastewater Treatment	HÜ	1						
16	Water Protection and Wastewater Management	HÜ	1	Wastewater Systems - Collection, Treatment and Reuse	VL	2	Process Modelling of Wastewater Treatment	PBL	2			
17												
18	Geo-Information-Systems in Water Management and Hydraulic Engineering	PBL	1	Wastewater Systems - Collection, Treatment and Reuse	HÜ	1						
19	**Groundwater**			**Soil and Groundwater Contamination**			**Practical Course in Water and Wastewater Technology**					
20	Geohydraulic and Solute Transport	VL	2	NAPL in Soil and Groundwater	VL	1						
21	Geohydraulic and Solute Transport	UE	1	NAPL in Soil and Groundwater	UE	2	Practical Course in Water and Wastewater Technology I	PR	2			
22	Simulation in Groundwater Hydrology	VL	1	Contamination and Remediation	PS	3						
23	Simulation in Groundwater Hydrology	UE	2				Practicle Course of Wastewater Technology II	PR	3			
24												
25	**Water Resources and -Supply**											
26	Chemistry of Drinking Water Treatment	VL	2									
27	Chemistry of Drinking Water Treatment	HÜ	1									
28	Water Resource Management	VL	2									
29	Water Resource Management	UE	1									
30												
	Business & Management (from catalogue) - 6LP											
	Nontechnical Elective Complementary Courses for Master (from catalogue) - 6LP											

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.