Course of Study Civil Engineering (Study Cohort w22)

Legend

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

Sample course plan A Master Civil Engineering (BAUMS) Dual study program

Specialisation Structural Engineering

LP								
1	**Finite Elements Methods**			**Practical module 2 (dual study program, Master's degree)**			**Practical module 3 (dual study program, Master's degree)**			**Selected Topics in Civil Engineering (part 2)**		
2	Finite Element Methods	VL	2	Practical term 2		0	Practical term 3		0	Selection from a catalog		
3	Finite Element Methods	HÜ	2									
4										**Master thesis (dual study program)**		
5												
6												
7	**Sustainability and Risk Management**											
8	Environment and Sustainability	VL	2									
9	Safety, Reliability and Risk Assessment	SE	2									
10												
11				**Design of Prestressed Structures and Concrete Bridges**			**Study Work Structural Engineering**					
12				Design of Prestressed Structures and Concreet Bridges	VL	3						
13	**Practical module 1 (dual study program, Master's degree)**			Design of Prestressed Structures and Concreet Bridges	HÜ	2						
14	Practical term 1		0									
15												
16												
17				**Statics and Dynamics of Structures**			**Computational Analysis of Concrete Structures**					
18				Fracture mechanics and fatigue in steel structures	VL	1	Computational Analysis of Concrete Structures	VL	2			
19				Fracture mechanics and fatigue in steel structures	HÜ	1	Computational Analysis of Concrete Structures	HÜ	1			
20				Structural Dynamics	VL	2	FE-Modeling of Concrete Structures	PBL	2			
21				Structural Dynamics	HÜ	2						
22												
23	**Geotechnics III**			**Steel Construction Project**			**Selected Topics in Civil Engineering (part 1)**					
24	Numerical Methods in Geotechnics	VL	3	Steel Construction Project	PS	4	Selection from a catalog					
25	Advanced Foundation Engineering	VL	2									
26	Advanced Foundation Engineering	HÜ	1				**Finite element modeling of structures**					
27							Finite element modeling of structures	VL	2			
28							Finite element modeling of structures	GÜ	2			
29	**Concrete Structures**			**Marine Geotechnics**								
30	Structural Concrete Members	VL	2	Marine Geotechnics	VL	1						
31	Structural Concrete Members	HÜ	2	Marine Geotechnics	HÜ	2						
32	Concrete Structures	SE	1	Steel Structures in Foundation and Hydraulic Engineering	VL	2						
33												
34												
35	**Steel and Composite Structures**											
36	Steel Bridges	VL	2									
37	Steel and Composite Structures	VL	2									
38	Steel and Composite Structures	HÜ	2									
39												
40												

Business & Management (from catalogue) - 6LP

Linking theory and practice (dual study program, Master's degree) (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.