Course of Study Civil- and Environmental Engineering (Study Cohort w20)

Sample course plan B Bachelor Civil- and Environmental Engineering (BUBS)

Specialisation Civil Engineering

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

LP						
1	**Principles of Building Materials and Building Physics**	**Building Materials and Building Chemistry**	**Structural Design**	**Reinforced Concrete Structures I**	**Steel Structures I**	**Applications in Civil / Environmental Engineering (part 2)**
2	Principles of Building Materials VL 2	Building Materials and Building Chemistry VL 4	Basics of Structural Design VL 2	Reinforced Concrete Design I VL 2	Steel Structures I VL 2	Selection from a catalog
3	Building Physics VL 2	Building Materials and Building Chemistry GÜ 1	Basics in Structural Design HÜ 1	Reinforced Concrete Design I HÜ 2	Steel Structures I HÜ 2	
4	Building Physics HÜ 1		Basics in Structural Design PBL 2	Project Seminar Concrete I SE 1		
5	Building Physics GÜ 1					**Steel Structures II**
6						Steel Structures II VL 2
7	**Chemistry**	**Construction Industry and Construction Management**	**Geotechnics I**	**Sanitary Engineering I**	**Hydraulic Engineering**	Steel Structures II HÜ 2
8	Chemistry I+II VL 4	Environmental Law VL 1	Soil Mechanics VL 2	Wastewater Disposal VL 2	Hydraulics VL 1	
9	Chemistry I+II HÜ 2	Construction Management VL 2	Soil Mechanics HÜ 2	Wastewater Disposal HÜ 1	Hydraulics PBL 1	
10		Construction Management HÜ 1	Soil Mechanics GÜ 2	Drinking Water Supply VL 2	Hydraulic Engineering VL 2	
11		Law of Building Contracts VL 1		Drinking Water Supply HÜ 1	Hydraulic Engineering PBL 1	**Computational Structural Mechanics**
12						Computational Stuctural Mechanics IV 2
13	**Mathematics I**	**Mechanics II: Mechanics of Materials**	**Hydromechanics and Hydrology**	**Structural Analysis II**	**Applications in Civil / Environmental Engineering (part 1)**	Computational Structural Mechanics GÜ 1
14	Linear Algebra I VL 2	Mechanics II VL 2	Hydromechanics VL 2	Structural Analysis II VL 2	Selection from a catalog	
15	Linear Algebra I GÜ 1	Mechanics II GÜ 2	Hydromechanics PBL 1	Structural Analysis II HÜ 2		**Bachelor Thesis**
16	Linear Algebra I HÜ 1	Mechanics II HÜ 2	Hydrology VL 1			
17	Analysis I VL 2		Hydrology PBL 1			
18	Analysis I GÜ 1				**Reinforced Concrete Structures II**	
19	Analysis I HÜ 1	**Mathematics II**	**Structural Analysis I**	**Geotechnics II**	Concrete Structures II VL 2	
20		Linear Algebra II VL 2	Structural Analysis I VL 2	Foundation Engineering VL 2	Concrete Structures II HÜ 2	
21	**Mechanics I (Statics)**	Linear Algebra II GÜ 1	Structural Analysis I HÜ 2	Foundation Engineering HÜ 2	Project Concrete Structures II PS 1	
22	Mechanics I VL 2	Linear Algebra II HÜ 1		Foundation Engineering GÜ 2		
23	Mechanics I GÜ 2	Analysis II VL 2			**Engineering Informatics**	
24	Mechanics I HÜ 1	Analysis II HÜ 1			Object-oriented Modelling IV 2	
25		Analysis II GÜ 1	**Mathematics III**	**Sustainable Building**	Object-oriented Modelling GÜ 2	
26			Analysis III VL 2	Sustainable Building SE 3	Databases IV 1	
27		**Water and Environment**	Analysis III GÜ 1	Circular flow economy and structural recycling PBL 3	Databases GÜ 1	
28		Water in the Environment VL 2	Analysis III HÜ 1			
29		Project on Water, Environment, Traffic PBL 2	Differential Equations 1 VL 2			
30			Differential Equations 1 GÜ 1			
31			Differential Equations 1 HÜ 1			
32						

Non-technical Courses for Bachelors (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.