Course of Study Civil- and Environmental Engineering (Study Cohort w23)

Sample course plan V Bachelor Civil- and Environmental Engineering (BUBS) Dual study program

Specialisation Traffic and Mobility

	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		**Introduction to Railways**
5	Building Physics GÜ 1					Introduction to Railways VL 2
6						Introduction to Railways HÜ 1
7	**Chemistry**	**Construction Industry and Construction Management**	**Geotechnics I**	**Sanitary Engineering I**	**Hydraulic Engineering**	
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	**Geoinformation Science**
11		Law of Building Contracts VL 1		Drinking Water Supply HÜ 1	Hydraulic Engineering PBL 1	Introduction to Geoinformation Science PBL 3
12						
13	**Mathematics I**	**Mathematics II**	**Hydromechanics and Hydrology**	**Structural Analysis II**	**Practical module 5 (dual study program, Bachelor's degree)**	**Planning Law and Environmental Law/ Sustainable Urban Development**
14	Mathematics I VL 4	Mathematics II VL 4	Hydromechanics VL 2	Structural Analysis II VL 2	Practical term 5 0	Planning law and Environmental law VL 2
15	Mathematics I HÜ 2	Mathematics II HÜ 2	Hydromechanics PBL 1	Structural Analysis II HÜ 2		Sustainable Urban Development VL 2
16	Mathematics I GÜ 2	Mathematics II GÜ 2	Hydrology VL 1	Structural Analysis II GÜ 1		
17			Hydrology PBL 1			
18						
19			**Structural Analysis I**	**Practical module 4 (dual study program, Bachelor's degree)**	**Applications in Civil + Environmental Engineering (part 1)**	**Bachelor thesis (dual study program)**
20			Structural Analysis I VL 2	Practical term 4 0	Selection from a catalog	
21	**Engineering Informatics**	**Water and Environment**	Structural Analysis I HÜ 2			
22	Object-oriented Modelling IV 2	Water in the Environment VL 2	Structural Analysis I GÜ 1		**Transportation Planning and Traffic Engineering**	
23	Object-oriented Modelling GÜ 2	Project on Water, Environment, Traffic PBL 2			Transport Planning and Traffic Engineering PBL 4	
24	Databases IV 1					
25	Databases GÜ 1		**Mathematics III - Differential Equations I**	**Mobility Concepts**		
26			Differential Equations 1 VL 2	Mobility Research and Transportation Projects PBL 3		
27	**Practical module 1 (dual study program, Bachelor's degree)**	**Practical module 2 (dual study program, Bachelor's degree)**	Differential Equations 1 GÜ 1	Mobility in Megacities and Developing Countries SE 3		
28	Practical term 1 0	Practical term 2 0	Differential Equations 1 HÜ 1			
29					**Foundations of Management**	
30			**Practical module 3 (dual study program, Bachelor's degree)**		Introduction to Management VL 3	
31			Practical term 3 0		Management Tutorial GÜ 2	
32						
33	**Engineering Mechanics I (Stereostatics)**	**Engineering Mechanics II (Elastostatics)**				
34	Engineering Mechanics I VL 2	Engineering Mechanics II VL 2				
35	Engineering Mechanics I GÜ 2	Engineering Mechanics II GÜ 2				
36	Engineering Mechanics I HÜ 1	Engineering Mechanics II HÜ 2				
37						
38						

Linking theory and practice (dual study program, Bachelor'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.