Course of Study Civil- and Environmental Engineering (Study Cohort w24)

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

Specialisation Civil Engineering

Legend			
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** Principles of Building Materials VL 2 Building Physics VL 2 Building Physics HÜ 1 Building Physics GÜ 1	**Building Materials and Building Chemistry** Building Materials and Building Chemistry VL 4 Building Materials and Building Chemistry GÜ 1	**Mathematics III - Differential Equations I** Differential Equations 1 VL 2 Differential Equations 1 GÜ 1 Differential Equations 1 HÜ 1	**Reinforced Concrete Structures I** Reinforced Concrete Design I VL 2 Reinforced Concrete Design I HÜ 2 Project Seminar Concrete I SE 1	**Steel Structures I** Steel Structures I VL 2 Steel Structures I HÜ 2	**Applications in Civil + Environmental Engineering (part 2)** Selection from a catalog
2						
3						
4			**Practical module 3 (dual study program, Bachelor's degree)** Practical term 3 0			**Steel Structures II** Steel Structures II VL 2 Steel Structures II HÜ 2
5						
6						
7	**Chemistry** Chemistry I+II VL 4 Chemistry I+II HÜ 2	**Construction Industry and Construction Management** Environmental Law VL 1 Construction Management VL 2 Construction Management HÜ 1 Law of Building Contracts VL 1		**Sanitary Engineering I** Wastewater Treatment VL 2 Wastewater Treatment HÜ 1 Drinking Water Supply VL 2 Drinking Water Supply HÜ 1	**Hydraulic Engineering** Hydraulics VL 1 Hydraulics PBL 1 Hydraulic Engineering VL 2 Hydraulic Engineering PBL 1	
8						
9						
10			**Structural Design** Basics of Structural Design VL 2 Basics in Structural Design HÜ 1 Basics in Structural Design PBL 2			**Building Information Modeling** Building Information Modeling IV 2 Building Information Modeling GÜ 2
11						
12						
13	**Mathematics I** Mathematics I VL 4 Mathematics I HÜ 2 Mathematics I GÜ 2	**Mathematics II** Mathematics II VL 4 Mathematics II HÜ 2 Mathematics II GÜ 2		**Practical module 4 (dual study program, Bachelor's degree)** Practical term 4 0	**Practical Module 5 (Dual Study Program, Bachelor's Degree)** Practical term 5 0	**Bachelor Thesis (Dual Study Program)**
14						
15						
16			**Hydromechanics and Hydrology** Hydromechanics VL 2 Hydromechanics PBL 1 Hydrology VL 1 Hydrology PBL 1			
17						
18						
19				**Structural Analysis II** Structural Analysis II VL 2 Structural Analysis II HÜ 3	**Applications in Civil + Environmental Engineering (part 1)** Selection from a catalog	
20						
21	**Engineering Informatics** Object-oriented Modelling IV 2 Object-oriented Modelling GÜ 2 Databases IV 1 Databases GÜ 1	**Water and Environment** Water in the Environment VL 2 Project on Water, Environment, Traffic PBL 2				
22						
23			**Soil Mechanics** Soil Mechanics VL 2 Soil Mechanics HÜ 2 Soil Mechanics GÜ 2		**Reinforced Concrete Structures II** Concrete Structures II VL 2 Concrete Structures II HÜ 2 Project Concrete Structures II PS 1	
24						
25				**Foundation Engineering** Foundation Engineering VL 2 Foundation Engineering HÜ 2 Foundation Engineering GÜ 2		
26						
27	**Practical module 1 (dual study program, Bachelor's degree)** Practical term 1 0	**Practical module 2 (dual study program, Bachelor's degree)** Practical term 2 0				
28						
29			**Structural Analysis I** Structural Analysis I VL 2 Structural Analysis I HÜ 3		**Structural Analysis III** Structural Analysis III VL 2 Structural Analysis III HÜ 1	
30						
31				**Sustainable Building** Circular flow economy and structural recycling IV 2 Sustainable building materials and buildings IV 2 Sustainable water management and hydraulic engineering IV 2		
32						
33	**Engineering Mechanics I (Stereostatics)** Engineering Mechanics I VL 2 Engineering Mechanics I GÜ 2 Engineering Mechanics I HÜ 2	**Engineering Mechanics II (Elastostatics)** Engineering Mechanics II VL 2 Engineering Mechanics II GÜ 2 Engineering Mechanics II HÜ 2				
34						
35						
36						
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.