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

Core Qualification Elective Compulsory Specialisation Elective Compulsory Focus Elective Compulsory

Interdisciplinary complement

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

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