Course of Study Civil- and Environmental Engineering (Study Cohort w22)

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