

Course of Study Civil Engineering (Study Cohort w24)

Sample course plan E Master Civil Engineering (BAUMS) Dual study program

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

Specialisation Computational Engineering							
1	Practical module 1 (dual study program, Master's degree) Practical term 1 0	Practical module 2 (dual study program, Master's degree) Practical term 2 0	Practical module 3 (dual study program, Master's degree) Practical term 3 0	Selected Topics in Civil Engineering (part 2) Selection from a catalog Master thesis (dual study program)			
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11	Sustainable Circular Economy Environment and Sustainability VL 2 Circular Economy SE 2	Modelling of Hydraulic Engineering Modelling of Flow in Rivers and Estuaries VL 3 Modelling of Waves PBL 1 Hydraulic Models PBL 1	Nonlinear Structural Analysis Nonlinear Structural Analysis VL 3 Nonlinear Structural Analysis GÜ 1				
12							
13							
14							
15							
16							
17	Finite elements Finite elements VL 3 Finite elements HÜ 2	Thin-walled structures Thin-walled structures VL 2 Thin-walled structures HÜ 2	Study work computational engineering				
18							
19							
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21							
22							
23	Geotechnics III Numerical Methods in Geotechnics VL 3 Advanced Foundation Engineering VL 2 Advanced Foundation Engineering HÜ 1	Digital Twinning in Civil Engineering Digital Twinning in Civil Engineering VL 2 Digital Twinning in Civil Engineering SE 2	Finite element modeling of structures Finite element modeling of structures VL 2 Finite element modeling of structures GÜ 2				
24							
25							
26							
27							
28							
29	Construction Robotics Construction Robotics PBL 6	Soil Mechanics and -Dynamics Soil Mechanics - Selected Topics VL 2 Soil Dynamics VL 2 Experimental Researches in Geotechnics PR 2	Selected Topics in Civil Engineering (part 1) Selection from a catalog				
30							
31							
32							
33						Modern discretization methods in structural mechanics Modern discretization methods in structural mechanics VL 2 Modern discretization methods in structural mechanics GÜ 2	
34							
35							
36							
37	Business & Management (from catalogue) - 6LP Linking theory and practice (dual study program, Master'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.

