

Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w22)

Sample course plan A Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7)) Dual study program

Legend:

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

Specialisation Green Technologies, Focus Water and Environmental Engineering

1	Chemistry Chemistry I+II VL 4 Chemistry I+II HÜ 2	Electrical Engineering II: Alternating Current Networks and Basic Devices Electrical Engineering II: Alternating Current Networks and Basic Devices VL 3 Electrical Engineering II: Alternating Current Networks and Basic Devices GÜ 2	Technical Thermodynamics II Technical Thermodynamics II VL 2 Technical Thermodynamics II HÜ 1 Technical Thermodynamics II GÜ 1	Signals and Systems Signals and Systems VL 3 Signals and Systems GÜ 2	Introduction to Control Systems Introduction to Control Systems VL 2 Introduction to Control Systems GÜ 2	Foundations of Management Introduction to Management VL 3 Management Tutorial GÜ 2	Advanced Internship AIW/ ES
2							
3							
4							
5							
6							
7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields Electrical Engineering I: Direct Current Networks and Electromagnetic Fields VL 3 Electrical Engineering I: Direct Current Networks and Electromagnetic Fields GÜ 2	Fundamentals of Mechanical Engineering Design Fundamentals of Mechanical Engineering VL 2 Fundamentals of Mechanical Engineering HÜ 2 Design	Mathematics III Analysis III VL 2 Analysis III GÜ 1 Analysis III HÜ 1 Differential Equations 1 VL 2 Differential Equations 1 GÜ 1 Differential Equations 1 HÜ 1	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	Green Technologies II (part 2) Practical Exercise Environmental Technology PR 1 Particle Technology and Solids Process Engineering Particle Technology I VL 2 Particle Technology I GÜ 1 Particle Technology I PR 2	
8							
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11							
12							
13	Mathematics I Mathematics I VL 4 Mathematics I HÜ 2 Mathematics I GÜ 2	Technical Thermodynamics I Technical Thermodynamics I VL 2 Technical Thermodynamics I HÜ 1 Technical Thermodynamics I GÜ 1	Practical module 3 (dual study program, Bachelor's degree) Practical term 3 0	Fundamentals of Fluid Mechanics Fundamentals of Fluid Mechanics VL 2 Fluid Mechanics for Process Engineering HÜ 2 Fundamentals on Fluid Mechanics GÜ 2	Heat and Mass Transfer Heat and Mass Transfer VL 2 Heat and Mass Transfer GÜ 2 Heat and Mass Transfer HÜ 1	Sanitary Engineering II Drinking Water Treatment SE 2 Management of Wastewater Infrastructure SE 2	
14							
15							
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20		Mathematics II Mathematics II VL 4 Mathematics II HÜ 2 Mathematics II GÜ 2	Engineering Mechanics III (Dynamics) Engineering Mechanics III VL 3 Engineering Mechanics III GÜ 2 Engineering Mechanics III HÜ 1	Sanitary Engineering I Wastewater Disposal VL 2 Wastewater Disposal HÜ 1 Drinking Water Supply VL 2 Drinking Water Supply HÜ 1	Green Technologies II (part 1) Environmental Technologie VL 2 Pollutant analysis VL 2		
21	Computer Science for Engineers - Introduction and Overview Computer Science for Engineers - Introduction and Overview VL 3 Computer Science for Engineers - Introduction and Overview GÜ 2						
22							
23							
24							
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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	Measurement Technology for Chemical and Bioprocess Engineering Measurement Technology VL 2 Physical Fundamentals of Measurement Technology VL 2 Practical Course Measurement Technology PR 2	Conventional Energy Systems and Energy Industry Power Industry VL 1 Energy markets and energy trading VL 2 Fossil Energy Systems VL 2 Fuels I VL 1	Hydraulic Engineering Hydraulics VL 1 Hydraulics PBL 1 Hydraulic Engineering VL 2 Hydraulic Engineering PBL 1		
28							
29							
30							
31							
32							
33	Engineering Mechanics I (Stereostatics) Engineering Mechanics I VL 2 Engineering Mechanics I GÜ 2 Engineering Mechanics I HÜ 1	Engineering Mechanics II (Elastostatics) Engineering Mechanics II VL 2 Engineering Mechanics II GÜ 2 Engineering Mechanics II HÜ 2	Green Technologies I Meteorology and Climate Systems - Introduction VL 2 Introduction Green Technologies SE 2 Meteorology and Climate Systems - Introduction GÜ 2	Renewable Energies Renewable Energies I VL 2 Renewable Energies II VL 2 Renewable Energies I HÜ 1 Fuels II VL 1	Green Technologies III Scientific Work and Writing SE 2 Study Work Green Technologies PS 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.

