Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w21)

Legend:

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

Sample course plan A Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))
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** Advanced Internship AIW/ ES: Preparation SE 1 Advanced Intenship AIW/ ES: Internship-accompanying Seminar SE 1
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 Design VL 2 Fundamentals of Mechanical Engineering Design HÜ 2	**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	**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 1 Heat and Mass Transfer HÜ 1	**Green Technologies II (part 2)** Practical Exercise Environmental Technology PR 1	
8						**Particle Technology and Solids Process Engineering** Particle Technology I VL 2 Particle Technology I GÜ 1 Particle Technology I PR 2	
9							
10							
11							
12							
13	**Mathematics I** Linear Algebra I VL 2 Linear Algebra I GÜ 1 Linear Algebra I HÜ 1 Analysis I VL 2 Analysis I GÜ 1 Analysis I HÜ 1	**Technical Thermodynamics I** Technical Thermodynamics I VL 2 Technical Thermodynamics I HÜ 1 Technical Thermodynamics I GÜ 1	**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	**Sanitary Engineering II** Drinking Water Treatment SE 2 Management of Wastewater Infrastructure SE 2	
14							
15							
16							
17							
18					**Hydraulic Engineering** Hydraulics VL 1 Hydraulics PBL 1 Hydraulic Engineering VL 2 Hydraulic Engineering PBL 1		
19		**Mechanics II: Mechanics of Materials** Mechanics II VL 2 Mechanics II GÜ 2 Mechanics II HÜ 2		**Conventional Energy Systems and Energy Industry** Power Industry VL 1 Energy markets and energy trading VL 2 Fossil Energy Systems VL 2 Fossil Energy Systems HÜ 1			**Bachelor Thesis**
20							
21	**Mechanics I (Statics)** Mechanics I VL 2 Mechanics I GÜ 2 Mechanics I HÜ 1		**Measurement Technology for Chemical and Bioprocess Engineering** Measurement Technology VL 2 Physical Fundamentals of Measurement Technology VL 2 Practical Course Measurement Technology PR 2		**Green Technologies III** Scientific Work and Writing SE 2 Study Work Green Technologies PS 2		
22							
23							
24							
25		**Mathematics II** Linear Algebra II VL 2 Linear Algebra II GÜ 1 Linear Algebra II HÜ 1 Analysis II VL 2 Analysis II HÜ 1 Analysis II GÜ 1		**Renewable Energies** Renewable Energies I VL 2 Renewable Energies II VL 2 Renewable Energies I HÜ 1 Renewable Energies II HÜ 1			
26							
27	**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		**Green Technologies I** Meteorology and Climate Systems - Introduction VL 2 Introduction Green Technologies SE 2 Meteorology and Climate Systems - Introduction GÜ 2				
28							
29							
30							
31							
32							
	Non-technical Courses for Bachelors (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.