

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	Process Engineering	Semester 2 FormHrs/wk	Semester 3 FormHrs/wk	Semester 4 FormHrs/wk	Semester 5 FormHrs/wk	Semester 6 FormHrs/wk	Semester 7 FormHrs/wk
1	Chemistry	Electrical Engineering II: Alternating Current Networks and Basic Devices	Technical Thermodynamics II	Signals and Systems	Introduction to Control Systems	Foundations of Management	Advanced Internship AIW/ ES
2	Chemistry I+II VL 4	Electrical Engineering II: Alternating Current Networks and Basic Devices VL 3	Technical Thermodynamics II VL 2	Signals and Systems VL 3	Introduction to Control Systems VL 2	Introduction to Management VL 3	Advanced Internship AIW/ ES: SE 1
3	Chemistry I+II HÜ 2	Electrical Engineering II: Alternating Current Networks and Basic Devices GÜ 2	Technical Thermodynamics II HÜ 1	Signals and Systems GÜ 2	Introduction to Control Systems GÜ 2	Management Tutorial GÜ 2	Preparation
4		Electrical Engineering II: Alternating Current Networks and Basic Devices	Technical Thermodynamics II GÜ 1				Advanced Internship AIW/ ES: Internship-accompanying Seminar SE 1
5							
6							
7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	Fundamentals of Mechanical Engineering Design	Mathematics III	Fundamentals of Fluid Mechanics	Heat and Mass Transfer	Process and Plant Engineering I	
8	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields VL 3	Fundamentals of Mechanical Engineering Design VL 2	Analysis III VL 2	Fundamentals of Fluid Mechanics VL 2	Heat and Mass Transfer VL 2	Process and Plant Engineering I VL 2	
9	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields GÜ 2	Fundamentals of Mechanical Engineering Design HÜ 2	Analysis III GÜ 1	Fluid Mechanics for Process Engineering HÜ 2	Heat and Mass Transfer GÜ 1	Process and Plant Engineering I HÜ 1	
10			Analysis III HÜ 1		Heat and Mass Transfer HÜ 1	Process and Plant Engineering I GÜ 1	
11			Differential Equations 1 VL 2				
12			Differential Equations 1 GÜ 1				
13			Differential Equations 1 HÜ 1				
13	Mathematics I	Technical Thermodynamics I		Phase Equilibria Thermodynamics	Thermal Separation Processes	Particle Technology and Solids Process Engineering	
14	Linear Algebra I VL 2	Technical Thermodynamics I VL 2		Phase Equilibria Thermodynamics VL 2	Thermal Separation Processes VL 2	Particle Technology and Solids Process Engineering VL 2	
15	Linear Algebra I GÜ 1	Technical Thermodynamics I HÜ 1		Phase Equilibria Thermodynamics GÜ 1	Thermal Separation Processes GÜ 2	Particle Technology I VL 2	
16	Linear Algebra I HÜ 1	Technical Thermodynamics I GÜ 1		Phase Equilibria Thermodynamics HÜ 1	Thermal Separation Processes HÜ 1	Particle Technology I GÜ 1	
17	Analysis I VL 2		Mechanics III (Dynamics)		Separation Processes PR 1	Particle Technology I PR 2	
18	Analysis I GÜ 1		Mechanics III VL 3				
19	Analysis I HÜ 1		Mechanics III GÜ 2				
20		Mechanics II: Mechanics of Materials	Mechanics III HÜ 1	Renewables Energy Systems	Chemical Reaction Engineering (part 1)	Computer Science for Engineers - Programming Concepts, Data Handling & Communication	Bachelor Thesis
21		Mechanics II VL 2		Renewable Energy VL 2	Chemical Reaction Engineering VL 2	Computer Science for Engineers - Programming Concepts, Data Handling & Communication VL 3	
22	Mechanics I (Statics)	Mechanics II GÜ 2	Fundamentals of Process Engineering and Material Engineering	Energy Systems and Energy Industry VL 2	Chemical Reaction Engineering HÜ 2	Computer Science for Engineers - Programming Concepts, Data Handling & Communication GÜ 2	
23	Mechanics I VL 2	Mechanics II HÜ 2	Introduction into Process Engineering/Bioprocess Engineering VL 2	Power Industry VL 1		Computer Science for Engineers - Programming Concepts, Data Handling & Communication	
24	Mechanics I GÜ 2		Fundamentals of material engineering VL 2	Renewable Energy GÜ 1	Environmental Technology	Computer Science for Engineers - Programming Concepts, Data Handling & Communication	
25	Mechanics I HÜ 1		Measurement Technology for VT/ BVT		Environmental Assessment VL 2	Computer Science for Engineers - Programming Concepts, Data Handling & Communication	
26		Mathematics II	Measurement Technology VL 2	Bioprocess Engineering - Fundamentals	Environmental Assessment GÜ 1	Chemical Reaction Engineering (part 2)	
27	Computer Science for Engineers - Introduction and Overview	Linear Algebra II VL 2	Physical Fundamentals of Measurement Technology VL 2	Bioprocess Engineering - Fundamentals VL 2		Experimental Course Chemical Engineering PR 2	
28	Computer Science for Engineers - Introduction and Overview VL 3	Linear Algebra II GÜ 1	Practical Course Measurement Technology PR 2	Bioprocess Engineering - Fundamentals HÜ 2			
29	Computer Science for Engineers - Introduction and Overview GÜ 2	Linear Algebra II HÜ 1		Bioprocess Engineering - Fundamental PR 2			
30		Analysis II VL 2		Practical Course			
31		Analysis II HÜ 1					
32		Analysis II GÜ 1					

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.

