Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w18)

Sample course plan C Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))
Specialisation Bioprocess Engineering

Legend:

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

LP	Semester 1	Form	Hrs/wk	Semester 2	Form	Hrs/wk	Semester 3	Form	Hrs/wk	Semester 4	Form	Hrs/wk	Semester 5	Form	Hrs/wk	Semester 6	Form	Hrs/wk	Semester 7	Form	Hrs/wk
1	**Chemistry**			**Electrical Engineering II: Alternating Current Networks and Basic Devices**			**Technical Thermodynamics II**			**Fundamentals of Fluid Mechanics**			**Introduction to Control Systems**			**Foundations of Management**			**Advanced Internship AIW/ GES**		
2	Chemistry I	VL	2	Electrical Engineering II: Alternating Current Networks and Basic Devices	VL	3	Technical Thermodynamics II	VL	2	Fundamentals of Fluid Mechanics	VL	2	Introduction to Control Systems	VL	2	Introduction to Management	VL	3			
3	Chemistry II	VL	2	Electrical Engineering II: Alternating Current Networks and Basic Devices	UE	2	Technical Thermodynamics II	HÜ	1	Fluid Mechanics for Process Engineering	HÜ	2	Introduction to Control Systems	UE	2	Management Tutorial	UE	2			
4	Chemistry I	HÜ	1				Technical Thermodynamics II	UE	1												
5	Chemistry II	HÜ	1																		
6																					
7	**Electrical Engineering I: Direct Current Networks and Electromagnetic Fields**			**Fundamentals of Mechanical Engineering Design**			**Mathematics III**			**Phase Equilibria Thermodynamics**			**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	Phase Equilibria Thermodynamics	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	UE	2	Fundamentals of Mechanical Engineering Design	HÜ	2	Analysis III	UE	1	Phase Equilibria Thermodynamics	UE	1	Heat and Mass Transfer	UE	1	Process and Plant Engineering I	HÜ	1			
10							Analysis III	HÜ	1	Phase Equilibria Thermodynamics	HÜ	1	Heat and Mass Transfer	HÜ	1	Process and Plant Engineering I	UE	1			
11							Differential Equations 1	VL	2												
12							Differential Equations 1	UE	1												
							Differential Equations 1	HÜ	1												
13	**Mathematics I**			**Technical Thermodynamics I**						**Signals and Systems**			**Thermal Separation Processes**			**Particle Technology and Solids Process Engineering**					
14	Linear Algebra I	VL	2	Technical Thermodynamics I	VL	2				Signals and Systems	VL	3	Thermal Separation Processes	VL	2	Particle Technology I	VL	2			
15	Linear Algebra I	UE	1	Technical Thermodynamics I	HÜ	1				Signals and Systems	UE	2	Thermal Separation Processes	UE	2	Particle Technology I	UE	1			
16	Linear Algebra I	HÜ	1	Technical Thermodynamics I	UE	1							Thermal Separation Processes	HÜ	1	Particle Technology I	PR	2			
17	Analysis I	VL	2										Separation Processes	PR	1						
18	Analysis I	UE	1																		
	Analysis I	HÜ	1																		
19				**Mechanics II: Mechanics of Materials**			**Mechanics III (Hydrostatics, Kinematics, Kinetics I)**			**Biochemistry and Microbiology**			**Chemical Reaction Engineering (part 1)**			**Chemical Reaction Engineering (part 2)**			**Bachelor Thesis**		
20				Mechanics II	VL	2	Mechanics III	VL	3	Biochemistry	VL	2	Chemical Reaction Engineering	VL	2	Experimental Course Chemical Engineering	PR	2			
21	**Mechanics I (Statics)**			Mechanics II	UE	2	Mechanics III	UE	2	Biochemistry	PBL	1	Chemical Reaction Engineering	HÜ	2	**Environmental Technology**					
22	Mechanics I	VL	2	Mechanics II	HÜ	2	Mechanics III	HÜ	1	Microbiology	VL	2									
23	Mechanics I	UE	2				**Computer Engineering**			Microbiology	PBL	1	**Bioprocess Engineering -**			Environmental	VL	2			
							Computer Engineering	VL	3												
							Computer Engineering	UE	1												

	Mechanics I HÜ 1				**Advanced** Bioprocess Engineering - Advanced VL 2 Bioprocess Engineering - Advanced UE 2	Assessment Environmental Assessment UE 1	
24							
25		**Mathematics II** Linear Algebra II VL 2 Linear Algebra II UE 1 Linear Algebra II HÜ 1 Analysis II VL 2 Analysis II HÜ 1 Analysis II UE 1		**Bioprocess Engineering - Fundamentals** Bioprocess Engineering - Fundamentals VL 2 Bioprocess Engineering- Fundamentals HÜ 2 Bioprocess Engineering - Fundamental Practical Course PR 2			
26							
27	**Programming in C** Programming in C VL 1 Programming in C PR 1		**Fundamentals of Process Engineering and Material Engineering** Introduction into Process Engineering/Bioprocess Engineering VL 2 Fundamentals of material engineering VL 2				
28							
29	**Physics for Engineers (AIW)** Physics for Engineers VL 2 Physics for Engineers UE 1						
30							
31							
32							
	Nontechnical Complementary 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.