

Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w16)

Sample course plan B Bachelor General Engineering Science (German program, 7 semester) (AIWS(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/Week	Semester 2	Form/hrs/Week	Semester 3	Form/hrs/Week	Semester 4	Form/hrs/Week	Semester 5	Form/hrs/Week	Semester 6	Form/hrs/Week	Semester 7	Form/hrs/Week				
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 GES					
2	Chemistry I	VL 2	Electrical Engineering II: Alternating Current Networks and Basic Devices UE 2		Technical Thermodynamics II	VL 2	Fundamentals of Fluid Mechanics VL 2 Fluid Mechanics for Process Engineering HÜ 2		Introduction to Control Systems VL 2 Introduction to Control Systems UE 2		Introduction to Management VL 3 Management Tutorial HÜ 2							
3	Chemistry II	VL 2																
4	Chemistry I	HÜ 1				Technical Thermodynamics II		HÜ 1										
5	Chemistry II	HÜ 1				Technical Thermodynamics II		UE 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		Thermal Separation Processes (part 2)		Bachelor Thesis	
8	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields UE 2	VL 3	Fundamentals of Mechanical Engineering Design HÜ 2		Analysis III	VL 2	Phase Equilibria Thermodynamics VL 2 Phase Equilibria Thermodynamics UE 1 Phase Equilibria Thermodynamics HÜ 1		Heat and Mass Transfer VL 2 Heat and Mass Transfer UE 1 Heat and Mass Transfer HÜ 1		Separation Processes PR 1							
9						Analysis III		UE 1										
10								Analysis III		HÜ 1								
11								Differential Equations 1		VL 2								
12								Differential Equations 1		UE 1								
13								Differential Equations 1		HÜ 1								
14	Mathematics I		Technical Thermodynamics I		Mechanics III (Hydrostatics, Kinematics, Kinetics I)		Signals and Systems		Thermal Separation Processes (part 1)		Process and Plant Engineering I							
15	Linear Algebra I	VL 2	Technical Thermodynamics I	VL 2				Signals and Systems	VL 3	Thermal Separation Processes	VL 2	Process and Plant Engineering I	HÜ 1					
16	Linear Algebra I	UE 1	Technical Thermodynamics I	HÜ 1				Signals and Systems	HÜ 1	Thermal Separation Processes	UE 2	Process and Plant Engineering I	UE 1					
17	Linear Algebra I	HÜ 1	Technical Thermodynamics I	UE 1						Thermal Separation Processes	HÜ 1	Process and Plant Engineering I						
18	Analysis I	VL 2	Technical Thermodynamics I							Thermal Separation Processes		Particle Technology and Solids Process Engineering						
19	Analysis I	UE 1								Thermal Separation Processes		Particle Technology I	VL 2					
20	Analysis I	HÜ 1									Particle Technology I	UE 1						
21	Mechanics I (Statics)		Mechanics II: Mechanics of Materials		Computer Engineering		Biochemistry and Microbiology		Chemical Reaction Engineering (part 1)		Particle Technology I	PR 2						
22	Mechanics I	VL 2	Mechanics II	VL 2	Computer Engineering	VL 3	Biochemistry	VL 2	Chemical Reaction Engineering	VL 2								
	Mechanics I	UE 2	Mechanics II	UE 2	Computer Engineering	UE 1	Biochemistry	PBL1	Chemical Reaction Engineering	HÜ 2								
	Mechanics I	HÜ 1					Microbiology	VL 2										
							Microbiology	PBL1	Bioprocess Engineering - Advanced		Environmental Technology (part 2)							
									Bioprocess Engineering - Advanced	VL 2	Practical Exercise Environmental	PR 1						
									Bioprocess Engineering	UE 2	Technology							

23									
24									
25									
26									
27		Mathematics II				Bioprocess Engineering - Fundamentals			
28	Programming in C	Linear Algebra II	VL 2			Bioprocess Engineering - Fundamentals	VL 2		
	Programming in C	Linear Algebra II	UE 1	Fundamentals of Process Engineering		Bioprocess Engineering - Fundamentals	HÜ 2	Environmental Technology (part 1)	
	Programming in C	Linear Algebra II	HÜ 1	Introduction into Process	VL 2	Bioprocess Engineering - Fundamentals	HÜ 2	Environmental Technologie	VL 2
	Programming in C	Analysis II	VL 2	Engineering/Bioprocess Engineering		Bioprocess Engineering - Fundamental Practical Course	PR 2		
29	Physics for Engineers (AIW)	Analysis II	HÜ 1	Fundamentals of material engineering	VL 2				
	Physics for Engineers	Analysis II	UE 1						
	Physics for Engineers								
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.