

# Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w19)

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	Semester 2	Form	Semester 3	Form	Semester 4	Form	Semester 5	Form	Semester 6	Form	Semester 7	Form					
1	<b>Chemistry</b>		<b>Electrical Engineering II: Alternating Current Networks and Basic Devices</b>		<b>Technical Thermodynamics II</b>		<b>Fundamentals of Fluid Mechanics</b>		<b>Introduction to Control Systems</b>		<b>Foundations of Management</b>		<b>Advanced Internship GES</b>						
2		Chemistry I		VL 2		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		Technical Thermodynamics II		VL 2		Fundamentals of Fluid Mechanics		VL 2		Introduction to Control Systems	VL 2	Management Tutorial	HÜ 2		
4		Chemistry I		HÜ 1		Electrical Engineering II: Alternating Current Networks and Basic Devices		VL 3		Technical Thermodynamics II		HÜ 1		Fluid Mechanics for Process Engineering	HÜ 2	Introduction to Control Systems	UE 2		
5		Chemistry II		HÜ 1		Electrical Engineering II: Alternating Current Networks and Basic Devices		UE 2		Technical Thermodynamics II		UE 1							
6																			
7	<b>Electrical Engineering I: Direct Current Networks and Electromagnetic Fields</b>		<b>Fundamentals of Mechanical Engineering Design</b>		<b>Mathematics III</b>		<b>Phase Equilibria Thermodynamics</b>		<b>Heat and Mass Transfer</b>		<b>Chemical Reaction Engineering (part 2)</b>		<b>Process and Plant Engineering I</b>						
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	Experimental Course Chemical Engineering	PR 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		
10										Analysis III		HÜ 1		Phase Equilibria Thermodynamics	HÜ 1	Heat and Mass Transfer	HÜ 1		
11		Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		UE 2						Differential Equations 1		VL 2		Phase Equilibria Thermodynamics	HÜ 1				
12										Differential Equations 1		UE 1							
13	<b>Mathematics I</b>		<b>Technical Thermodynamics I</b>		<b>Mechanics III (Hydrostatics, Kinematics, Kinetics I)</b>		<b>Signals and Systems</b>		<b>Thermal Separation Processes</b>		<b>Particle Technology and Solids Process Engineering</b>		<b>Bachelor Thesis</b>						
14		Linear Algebra I		VL 2		Technical Thermodynamics I		VL 2		Mechanics III		VL 3		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		Mechanics III		UE 2		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		Mechanics III		HÜ 1				Thermal Separation Processes	HÜ 1	Particle Technology I	PR 2
17		Analysis I		VL 2		Technical Thermodynamics I		UE 1		Mechanics III		HÜ 1				Thermal Separation Processes	PR 1		
18		Analysis I		UE 1															
19			<b>Mechanics II: Mechanics of Materials</b>		<b>Computer Engineering</b>		<b>Biochemistry and Microbiology</b>		<b>Chemical Reaction Engineering (part 1)</b>		<b>Environmental Technology</b>		<b>Bachelor Thesis</b>						
20																			
21	<b>Mechanics I (Statics)</b>			Mechanics II		VL 2		Computer Engineering		VL 3		Biochemistry		VL 2	Chemical Reaction Engineering	VL 2	Environmental Assessment	VL 2	
22	Mechanics I	VL 2		Mechanics II		UE 2		Computer Engineering		UE 1		Biochemistry		PBL1	Chemical Reaction Engineering	HÜ 2	Environmental Assessment	UE 1	
23	Mechanics I	UE 2		Mechanics II		HÜ 2						Microbiology		VL 2					
24	Mechanics I	HÜ 1										Microbiology		PBL1					
25									<b>Bioprocess Engineering - Advanced</b>										

26		<b>Mathematics II</b>		<b>Bioprocess Engineering - Fundamentals</b>	Bioprocess Engineering VL 2 - Advanced
27		Linear Algebra II	VL 2		
28	<b>Programming in C</b>	Linear Algebra II	UE 1	<b>Fundamentals of Process Engineering and Material Engineering</b>	Bioprocess Engineering VL 2 - Fundamentals
	Programming in C	Linear Algebra II	HÜ 1		Bioprocess Engineering UE 2 - Advanced
	Programming in C	Analysis II	VL 2	Introduction into Process Engineering/Bioprocess Engineering	
29	<b>Physics for Engineers (AIW)</b>	Analysis II	HÜ 1	Fundamentals of material engineering	Bioprocess Engineering- HÜ 2 Fundamentals
	Physics for Engineers	Analysis II	UE 1		Bioprocess Engineering PR 2 - Fundamental Practical Course
	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.