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 Bioprocess Engineering

LP	Semester 1	FormHrs/wk	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: Preparation	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	Advanced Intenship AIW/ ES: Internship-accompanying Seminar	SE 1
4					Technical Thermodynamics II	GÜ 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					Analysis III	GÜ 1			Heat and Mass Transfer	GÜ 1	Process and Plant Engineering I	HÜ 1		
10	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	GÜ 2	Fundamentals of Mechanical Engineering Design	HÜ 2	Analysis III	HÜ 1	Fluid Mechanics for Process Engineering	HÜ 2	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	**Mathematics I**		**Technical Thermodynamics I**		Differential Equations 1	HÜ 1	**Phase Equilibria Thermodynamics**		**Thermal Separation Processes**		**Particle Technology and Solids Process Engineering**			
14	Linear Algebra I	VL 2	Technical Thermodynamics I	VL 2	**Mechanics III (Dynamics)**		Phase Equilibria Thermodynamics	VL 2	Thermal Separation Processes	VL 2	Particle Technology I	VL 2		
15	Linear Algebra I	GÜ 1	Technical Thermodynamics I	HÜ 1	Mechanics III	VL 3	Phase Equilibria Thermodynamics	GÜ 1	Thermal Separation Processes	GÜ 2	Particle Technology I	GÜ 1		
16	Linear Algebra I	HÜ 1	Technical Thermodynamics I	GÜ 1	Mechanics III	GÜ 2	Phase Equilibria Thermodynamics	HÜ 1	Thermal Separation Processes	HÜ 1	Particle Technology I	PR 2		
17	Analysis I	VL 2			Mechanics III	HÜ 1			Separation Processes	PR 1				
18	Analysis I	GÜ 1												
19	Analysis I	HÜ 1	**Mechanics II: Mechanics of Materials**				**Biochemistry and Microbiology**		**Chemical Reaction Engineering (part 1)**		**Chemical Reaction Engineering (part 2)**		**Bachelor Thesis**	
20			Mechanics II	VL 2			Biochemistry	VL 2	Chemical Reaction Engineering	VL 2	Experimental Course Chemical Engineering	PR 2		
21	**Mechanics I (Statics)**		Mechanics II	GÜ 2	**Fundamentals of Process Engineering and Material Engineering**		Biochemistry	PBL 1	Chemical Reaction Engineering	HÜ 2	**Environmental Technology (part 2)**			
22	Mechanics I	VL 2	Mechanics II	HÜ 2	Introduction into Process Engineering/Bioprocess Engineering	VL 2	Microbiology	VL 2			Practical Exercise Environmental Technology	PR 1		
23	Mechanics I	GÜ 2			Fundamentals of material engineering	VL 2	Microbiology	PBL 1	**Bioprocess Engineering - Advanced**					
24	Mechanics I	HÜ 1							Bioprocess Engineering - Advanced	VL 2				
25			**Mathematics II**		**Measurement Technology for VT/ BVT**		**Bioprocess Engineering - Fundamentals**		Bioprocess Engineering - Advanced	GÜ 2				
26			Linear Algebra II	VL 2	Measurement Technology	VL 2	Bioprocess Engineering - Fundamentals	VL 2						
27	**Computer Science for Engineers - Introduction and Overview**		Linear Algebra II	GÜ 1	Physical Fundamentals of Measurement Technology	VL 2	Bioprocess Engineering- Fundamentals	HÜ 2	**Environmental Technology (part 1)**					
28	Computer Science for Engineers - Introduction and Overview	VL 3	Linear Algebra II	HÜ 1	Practical Course Measurement Technology	PR 2	Bioprocess Engineering - Fundamental Practical Course	PR 2	Environmental Technologie	VL 2				
29			Analysis II	VL 2										
30	Computer Science for Engineers - Introduction and Overview	GÜ 2	Analysis II	HÜ 1										
31			Analysis II	GÜ 1										
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.