Course of Study General Engineering Science (German program) (Study Cohort w15)

Sample course plan - Bachelor General Engineering Science (German program) (AIWBS)
Specialisation Chemical 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
1	**Physics for Engineers (part 1)**			**Electrical Engineering II: Alternating Current Networks and Basic Devices**			**Technical Thermodynamics II**			**Physical Chemistry (part 2)**			**Introduction to Control Systems**			**Foundations of Management**		
2	Physics for Engineers	VL	2				Technical Thermodynamics II	VL	2	Environmental Assessment	VL	2	Introduction to Control Systems	VL	2	Introduction to Management	VL	4
3	Physics for Engineers	UE	1	Electrical Engineering II: Alternating Current Networks and Basic Devices	VL	3	Technical Thermodynamics II	HÜ	1				Introduction to Control Systems	UE	2	Project Entrepreneurship	POL	2
4				Electrical Engineering II: Alternating Current Networks and Basic Devices	UE	2	Technical Thermodynamics II	UE	1	**Fundamentals of Fluid Mechanics**								
5	**Chemistry**									Fundamentals of Fluid Mechanics	VL	2						
6	Chemistry I	VL	2							Exercises in Fluid Mechanics for Process Engineering	HÜ	1						
7	Chemistry II	VL	2	**Fundamentals of Mechanical Engineering Design**			**Computer Engineering**						**Heat and Mass Transfer**			**Thermal Separation Processes (part 2)**		
8	Chemistry I	HÜ	1				Computer Engineering	VL	3				Heat and Mass Transfer	VL	2	Separation Processes	PR	1
9	Chemistry II	HÜ	1	Fundamentals of Mechanical Engineering Design	VL	2	Computer Engineering	UE	1				Heat and Mass Transfer	UE	1	**Chemical Reaction Engineering (part 2)**		
10				Fundamentals of Mechanical Engineering Design	HÜ	2				**Phase Equilibria Thermodynamics**						Experimental Course Chemical Engineering	PR	2
11	**Electrical Engineering I: Direct Current Networks and Electromagnetic Fields**									Thermodynamics III	VL	2				**Process and Plant Engineering I**		
12										Thermodynamics III	UE	1				Process and Plant Engineering I	VL	2
13	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	VL	3	**Technical Thermodynamics I**			**Mathematics III**			Thermodynamics III	HÜ	1	**Thermal Separation Processes (part 1)**			Process and Plant Engineering I	HÜ	1
14	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	UE	2	Technical Thermodynamics I	VL	2	Analysis III	VL	2				Thermal Separation Processes	VL	3	Process and Plant Engineering I	UE	1
15				Technical Thermodynamics I	HÜ	1	Analysis III	UE	1				Thermal Separation Processes	UE	2			
16				Technical Thermodynamics I	UE	1	Analysis III	HÜ	1	**Signals and Systems**			Thermal Separation Processes	HÜ	1			
17	**Mathematics I**						Differential Equations 1	VL	2	Signals and Systems	VL	3				**Particle Technology and Solids Process Engineering**		
18	Linear Algebra I	VL	2				Differential Equations 1	UE	1	Signals and Systems	HÜ	1				Particle Technology I	VL	2
19	Linear Algebra I	UE	1	**Mechanics II: Mechanics of Materials**			Differential Equations 1	HÜ	1				**Chemical Reaction Engineering (part 1)**			Particle Technology I	UE	1
20	Linear Algebra I	HÜ	1	Mechanics II	VL	2							Chemical Reaction Engineering	VL	2	Particle Technology I	PR	2
21	Analysis I	VL	2	Mechanics II	UE	2							Chemical Reaction Engineering	HÜ	2			
22	Analysis I	UE	1	Mechanics II	HÜ	2	**Mechanics III (Hydrostatics, Kinematics, Kinetics I)**			**Practical Training in Process Engineering (part 1)**			**Practical Training in Process Engineering (part 2)**			**Bachelor Thesis**		
23	Analysis I	HÜ	1				Mechanics III	VL	3	Practical Training in Measurement Techniques	PR	3	Measurement Methods in Process Engineering	VL	2			
24							Mechanics III	UE	2									
25	**Mechanics I (Statics)**			**Mathematics II**			Mechanics III	HÜ	1	**Bioprocess Engineering - Fundamentals**								
26	Mechanics I	VL	2	Linear Algebra II	VL	2				Bioprocess Engineering - Fundamentals	VL	2						
27	Mechanics I	UE	2	Linear Algebra II	UE	1												
28	Mechanics I	HÜ	1	Linear Algebra II	HÜ	1	**Fundamentals of Process Engineering**			Bioprocess Engineering- Fundamentals	HÜ	2						
29				Analysis II	VL	2	Environmental Technologie	VL	2									
30				Analysis II	HÜ	1	Introduction into Process Engineering/Bioprocess Engineering	VL	2	Bioprocess Engineering - Fundamental Practical Course	PR	2						
31				Analysis II	UE	1	Fundamentals of Technical Drawing and Materials	VL	1									
32							Fundamentals of Technical Drawing and Materials	HÜ	1									

33		**Programming in C**			**Physical Chemistry (part 1)**		
34		Programming in C	VL	1	Physical Chemistry	VL	2
		Programming in C	PR	1	Physical Chemistry	PR	2
35		**Physics for Engineers (part 2)**					
		Physics-Lab for ET/ AIW/ GES	PR	1			
36							
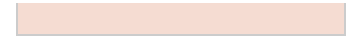
Nontechnical Complementary Courses for Bachelors (from catalogue) - 6LP

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.