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

Sample course plan B Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))

Specialisation: Bioprocess Engineering

#	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/ ES**	
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	Advanced Internship AIW/ ES: Preparation	SE 1
3	Chemistry II	VL 2			Technical Thermodynamics II	HÜ 1	Fluid Mechanics for Process Engineering	HÜ 2	Introduction to Control Systems	GÜ 2	Management Tutorial	GÜ 2	Advanced Intenship AIW/ ES: Internship-accompanying Seminar	SE 1
4	Chemistry I	HÜ 1	Electrical Engineering II: Alternating Current Networks and Basic Devices	GÜ 2	Technical Thermodynamics II	GÜ 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			Fundamentals of Mechanical Engineering Design	HÜ 2	Analysis III	GÜ 1	Phase Equilibria Thermodynamics	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			Analysis III	HÜ 1	Phase Equilibria Thermodynamics	HÜ 1	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	**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				
15	Linear Algebra I	GÜ 1	Technical Thermodynamics I	HÜ 1			Signals and Systems	GÜ 2	Thermal Separation Processes	GÜ 2	Particle Technology I	VL 2		
16	Linear Algebra I	HÜ 1	Technical Thermodynamics I	GÜ 1	**Mechanics III (Hydrostatics, Kinematics, Kinetics I)**				Thermal Separation Processes	HÜ 1	Particle Technology I	GÜ 1		
17	Analysis I	VL 2			Mechanics III	VL 3			Separation Processes	PR 1	Particle Technology I	PR 2		
18	Analysis I	GÜ 1			Mechanics III	GÜ 2								
19	Analysis I	HÜ 1	**Mechanics II: Mechanics of Materials**		Mechanics III	HÜ 1	**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	**Computer Engineering**		Biochemistry	PBL 1	Chemical Reaction Engineering	HÜ 2				
	Mechanics I	VL 2	Mechanics II	HÜ 2	Computer Engineering	VL 3	Microbiology	VL 2			**Environmental Technology (part 2)**			
22	Mechanics I	GÜ 2			Computer Engineering	GÜ 1	Microbiology	PBL 1			Practical Exercise Environmental Technology	PR 1		
	Mechanics I	HÜ 1												
23														
24									**Bioprocess Engineering - Advanced**					
25			**Mathematics II**				**Bioprocess Engineering - Fundamentals**		Bioprocess Engineering - Advanced	VL 2				
26			Linear Algebra II	VL 2			Bioprocess Engineering - Fundamentals	VL 2	Bioprocess Engineering - Advanced	GÜ 2				
27	**Programming in C**		Linear Algebra II	GÜ 1			Bioprocess Engineering- Fundamentals	HÜ 2						
	Programming in C	VL 1	Linear Algebra II	HÜ 1	**Fundamentals of Process Engineering and Material Engineering**		Bioprocess Engineering - Fundamental Practical Course	PR 2						
28	Programming in C	PR 1	Analysis II	VL 2	Introduction into Process Engineering/Bioprocess Engineering	VL 2								
29	**Physics for Engineers (AIW)**		Analysis II	HÜ 1	Fundamentals of material engineering	VL 2			**Environmental Technology (part 1)**					
	Physics for Engineers	VL 2	Analysis II	GÜ 1					Environmental Technologie	VL 2				
30	Physics for Engineers	GÜ 1												
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.