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

Sample course plan B Bachelor General Engineering Science (English program, 7 semester) (GESBS(7))
Specialisation Energy and Enviromental 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	Semester 7	Form	Hrs/wk
1	**Chemistry (GES)**			**Fundamentals of Mechanical Engineering Design**			**Technical Thermodynamics II**			**Mechanical Engineering: Design (part 2)**			**Introduction to Control Systems**			**Foundations of Management**			**Advanced Internship GES**		
2																					
3	Chemistry I	VL	2	Fundamentals of Mechanical Engineering Design	VL	2	Technical Thermodynamics II	VL	2	Team Project Design Methodology	PBL	2	Introduction to Control Systems	VL	2	Introduction to Management	VL	3			
	Chemistry II	VL	2				Technical Thermodynamics II	HÜ	1	Mechanical Design Project II	TT	3	Introduction to Control Systems	UE	2	Management Tutorial	HÜ	2			
	Chemistry I	HÜ	1	Fundamentals of Mechanical Engineering Design	HÜ	2	Technical Thermodynamics II	UE	1												
	Chemistry II	HÜ	1																		
4										**Fundamentals of Materials Science (part 2)**											
5										Fundamentals of Materials Science II	VL	2									
6										**Fundamentals of Fluid Mechanics**											
7	**Linear Algebra**			**Technical Thermodynamics I**			**Mathematics III**			Fundamentals of Fluid Mechanics	VL	2	**Heat and Mass Transfer**			**Thermal Separation Processes (part 2)**					
	Linear Algebra	VL	4	Technical Thermodynamics I	VL	2	Analysis III	VL	2	Fluid Mechanics for Process Engineering	HÜ	2	Heat and Mass Transfer	VL	2	Separation Processes	PR	1			
	Linear Algebra	HÜ	2				Analysis III	UE	1				Heat and Mass Transfer	UE	1						
8	Linear Algebra	UE	2	Technical Thermodynamics I	HÜ	1	Analysis III	HÜ	1				Heat and Mass Transfer	HÜ	1	**Environmental Technology (part 2)**					
				Technical Thermodynamics I	UE	1	Differential Equations 1	VL	2							Practical Exercise Environmental Technology	PR	1			
9							Differential Equations 1	UE	1												
10							Differential Equations 1	HÜ	1							**Particle Technology and Solids Process Engineering**					
11																Particle Technology I	VL	2			
12										**Electrical Machines**						Particle Technology I	UE	1			
13				**Mathematical Analysis**						Electrical Machines	VL	3	**Thermal Separation Processes (part 1)**			Particle Technology I	PR	2			
14				Mathematical Analysis	VL	4				Electrical Machines	HÜ	2	Thermal Separation Processes	VL	2						
15	**Electrical Engineering I**			Mathematical Analysis	HÜ	2	**Mechanics III (GES)**						Thermal Separation Processes	UE	2	**Environmental Technology**					
16				Mathematical Analysis	UE	2	Mechanics III	HÜ	1							Environmental Assessment	VL	2			
17	Electrical Engineering I	VL	3				Mechanics III	UE	2				Thermal Separation Processes	HÜ	1	Environmental Assessment	UE	1			
	Electrical Engineering I	UE	2				Mechanics III	VL	3												
18										**Renewables and Energy Systems**			**Gas and Steam Power Plants**			**Process and Plant Engineering I**					
19										Renewable Energy	VL	2	Gas and Steam Power Plants	VL	3	Process and Plant Engineering I	VL	2	**Bachelor Thesis**		
20										Energy Systems and Energy Industry	VL	2	Gas and Steam Power Plants	HÜ	2	Process and Plant Engineering I	HÜ	1			
21	**Mechanics I (GES)**			**Electrical Engineering II**			**Computer Engineering**			Power Industry	VL	1				Process and Plant Engineering I	UE	1			
22										Renewable Energy	UE	1									
23	Mechanics I	VL	2	Electrical Engineering II	VL	3	Computer Engineering	VL	3												
	Mechanics I	HÜ	3	Electrical Engineering II	UE	2	Computer Engineering	UE	1												
24																					

25					
26					
27	**Programming in C** Programming in C VL 1 Programming in C PR 1	**Mechanics II (GES)** Mechanics II VL 2 Mechanics II HÜ 2	**Mechanical Engineering: Design (part 1)** Embodiment Design and 3D-CAD VL 2 Mechanical Design Project I TT 3	**Measurement Technology for Mechanical and Process Engineers** Measurement Technology for Mechanical and Process Engineers VL 2 Measurement Technology for Mechanical and Process Engineers HÜ 1 Practical Course: Measurement and Control Systems PR 2	
28					
29	**Physics for Engineers (GES)** Physics for Engineers VL 2 Physics for Engineers UE 1				
30			**Fundamentals of Materials Science (part 1)** Fundamentals of Materials Science I VL 2 Physical and Chemical Basics of Materials Science VL 2	**Environmental Technology (part 1)** Environmental Technologie VL 2	
31					
32					
33					

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.