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

Sample course plan B Bachelor General Engineering Science (English program, 7 semester) (GESBS(7))
Specialisation Mechanical Engineering, Focus Energy Systems

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)**			**Technical Thermodynamics I**			**Technical Thermodynamics II**			**Mechanical Engineering: Design (part 2)**			**Introduction to Control Systems**			**Foundations of Management**			**Advanced Internship GES**		
2	Chemistry I	VL	2	Technical Thermodynamics I	VL	2	Technical Thermodynamics II	VL	2	Team Project Design Methodology	PBL	2	Introduction to Control Systems	VL	2	Introduction to Management	VL	3			
3	Chemistry II	VL	2	Technical Thermodynamics I	HÜ	1	Technical Thermodynamics II	HÜ	1	Mechanical Design Project II	PBL	3	Introduction to Control Systems	UE	2	Management Tutorial	HÜ	2			
4	Chemistry I	HÜ	1	Technical Thermodynamics I	UE	1	Technical Thermodynamics II	UE	1	**Fundamentals of Materials Science (part 2)**											
5	Chemistry II	HÜ	1							Fundamentals of Materials Science II	VL	2									
6										**Fluid Dynamics**											
7	**Linear Algebra**			**Mathematical Analysis**			**Mathematics III**			Fluid Mechanics	VL	3	**Measurement Technology for Mechanical and Process Engineers**			**Advanced Mechanical Engineering Design (part 2)**					
8	Linear Algebra	VL	4	Mathematical Analysis	VL	4	Analysis III	VL	2	Fluid Mechanics	HÜ	2	Measurement Technology for Mechanical and Process Engineers	VL	2	Advanced Mechanical Engineering Design II	VL	2			
9	Linear Algebra	HÜ	2	Mathematical Analysis	HÜ	2	Analysis III	UE	1				Measurement Technology for Mechanical and Process Engineers	HÜ	1	Advanced Mechanical Engineering Design II	HÜ	2			
10	Linear Algebra	UE	2	Mathematical Analysis	UE	2	Analysis III	HÜ	1				Practical Course: Measurement and Control Systems	PR	2	**Reciprocating Machinery (part 2)**					
11							Differential Equations 1	VL	2							Internal Combustion Engines I	VL	2			
12							Differential Equations 1	UE	1	**Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)**						Internal Combustion Engines I	HÜ	1			
13							Differential Equations 1	HÜ	1	Mechanics IV	VL	3	**Advanced Mechanical Engineering Design (part 1)**			**Fundamentals of Production and Quality Management**					
14										Mechanics IV	UE	2	Advanced Mechanical Engineering Design I	VL	2	Production Process Organization	VL	2			
15	**Electrical Engineering I**			**Electrical Engineering II**			**Mechanics III (GES)**			Mechanics IV	HÜ	1	Advanced Mechanical Engineering Design I	HÜ	2	Quality Management	VL	2			
16	Electrical Engineering I	VL	3	Electrical Engineering II	VL	3	Mechanics III	HÜ	1				**Heat Transfer**								
17	Electrical Engineering I	UE	2	Electrical Engineering II	UE	2	Mechanics III	UE	2				Heat Transfer	VL	3						
18							Mechanics III	VL	3				Heat Transfer	HÜ	2						
19										**Signals and Systems**						**Renewables and Energy Systems**			**Bachelor Thesis**		
20										Signals and Systems	VL	3				Renewable Energy	VL	2			
21	**Mechanics I (GES)**			**Mechanics II (GES)**			**Computer Engineering**			Signals and Systems	UE	2				Energy Systems and	VL	2			
22													**Reciprocating Machinery**								
23	Mechanics I	VL	2	Mechanics II	VL	2	Computer Engineering	VL	3												

	Mechanics I HÜ 3	Mechanics II HÜ 2	Computer Engineering UE 1		**(part 1)** Fundamentals of Reciprocating Engines and Turbomachinery - Part Reciprocating Engines VL 1 Fundamentals of Reciprocating Engines and Turbomachinery - Part Reciprocating Engines HÜ 1	Energy Industry Power Industry VL 1 Renewable Energy UE 1	
24							
25							
26							
27	**Programming in C** Programming in C VL 1 Programming in C PR 1	**Fundamentals of Mechanical Engineering Design (GES)** Fundamentals of Mechanical Engineering VL 2 Fundamentals of Mechanical Engineering UE 2	**Mechanical Engineering: Design (part 1)** Embodiment Design and 3D-CAD VL 2 Mechanical Design Project I PBL3		**Gas and Steam Power Plants** Gas and Steam Power Plants VL 3 Gas and Steam Power Plants HÜ 1		
28							
29	**Physics for Engineers (GES)** Physics for Engineers VL 2 Physics for Engineers UE 1		**Fundamentals of Materials Science (part 1)** Fundamentals of Materials Science I VL 2 Physical and Chemical Basics of Materials Science VL 2				
30							
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.