

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

Sample course plan C 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	ForHrs	Semester 2	ForHrs	Semester 3	ForHrs	Semester 4	ForHrs	Semester 5	ForHrs	Semester 6	ForHrs	Semester 7	ForHrs/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	PBL2	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	PBL3	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								
5	Chemistry II	HÜ 1					Fundamentals of Materials Science (part 2)							
6							Fundamentals of Materials Science II	VL 2						
7	Linear Algebra		Mathematical Analysis		Mathematics III		Fluid Dynamics		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	VL 3	Measurement	VL 2	Advanced Mechanical Engineering Design II	VL 2		
9	Linear Algebra	HÜ 2	Mathematical Analysis	HÜ 2	Analysis III	UE 1	Fluid Mechanics	HÜ 2	Technology for Mechanical and Process Engineers		Advanced Mechanical Engineering Design II	HÜ 2		
10	Linear Algebra	UE 2	Mathematical Analysis	UE 2	Analysis III	HÜ 1			Measurement	HÜ 1			Reciprocating Machinery (part 2)	
11					Differential Equations 1	VL 2			Technology for Mechanical and Process Engineers				Internal Combustion Engines I	VL 2
12					Differential Equations 1	UE 1	Mechanics IV (Kinetics II, Oscillations, Analytical Systems)		Practical Course: Measurement and Control Systems	PR 2			Internal Combustion Engines I	HÜ 1
13					Differential Equations 1	HÜ 1	Mechanics IV	VL 3			Advanced Mechanical Engineering Design (part 1)			
14							Mechanics IV	UE 2			Advanced Mechanical Engineering Design I	VL 2	Advanced Materials	
15	Electrical Engineering I		Electrical Engineering II		Mechanics III (GES)						Advanced Mechanical Engineering Design I	HÜ 2	Advanced Materials Characterization	VL 2
16	Electrical Engineering I	VL 3	Electrical Engineering II	VL 3	Mechanics III	HÜ 1					Advanced Mechanical Engineering Design I	VL 2	Advanced Materials Design	VL 2
17	Electrical Engineering I	UE 2	Electrical Engineering II	UE 2	Mechanics III	VL 3							Advanced Materials Design	HÜ 2
18									Heat Transfer					
19									Heat Transfer	VL 3				
20									Heat Transfer	HÜ 2				
21	Mechanics I (GES)		Mechanics II (GES)		Computer Engineering		Signals and Systems				Renewables and Energy Systems			
22	Mechanics I	VL 2	Mechanics II	VL 2	Computer Engineering	VL 3	Signals and Systems	VL 3			Renewable Energy	VL 2		Bachelor Thesis
23							Signals and Systems	UE 2			Energy Systems and	VL 2		
									Reciprocating Machinery					

	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 Systems Energy Industry VL 1 Power Industry VL 1 Renewable Energy UE 1	
24							
25							
26							
27							
28	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	Mechanical Engineering: Design (part 1) Embodiment Design and 3D-CAD VL 2		Computational Fluid Dynamics I Computational Fluid Dynamics I VL 2 Computational Fluid Dynamics I HÜ 2		
29	Physics for Engineers (GES) Physics for Engineers VL 2 Physics for Engineers UE 1	Fundamentals of Mechanical Engineering UE 2	Mechanical Design Project I PBL3				
30							
31							
32							
33					Fundamentals of Materials Science (part 1) Fundamentals of Materials Science I VL 2 Physical and Chemical Basics of Materials Science VL 2		
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.