

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

Sample course plan A 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	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7					
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								Chemistry 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 II HÜ 1	Mechanical Design Project II TT 3	Introduction to Control Systems UE 2	Management Tutorial HÜ 2
4								Chemistry I HÜ 1	Fundamentals of Mechanical Engineering Design HÜ 2	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										Fluid Dynamics		
8	Linear Algebra	Technical Thermodynamics I	Mathematics III	Fluid Mechanics VL 3	Measurement Technology for Mechanical and Process Engineers	Advanced Mechanical Engineering Design (part 2)						
9								Linear Algebra VL 4	Analysis III VL 2	Fluid Mechanics HÜ 2	Measurement VL 2	Advanced Mechanical Engineering Design II VL 2
10								Linear Algebra HÜ 2	Technical Thermodynamics I HÜ 1	Analysis III UE 1	Technology for Mechanical and Process Engineers HÜ 1	Advanced Mechanical Engineering Design II HÜ 2
11								Linear Algebra UE 2	Technical Thermodynamics I UE 1	Differential Equations 1 VL 2	Measurement HÜ 1	Advanced Mechanical Engineering Design II HÜ 2
12									Technical Thermodynamics I HÜ 1	Differential Equations 1 UE 1	Technology for Mechanical and Process Engineers PR 2	Reciprocating Machinery (part 2)
13										Differential Equations 1 HÜ 1	Practical Course: Measurement and Control Systems	Internal Combustion Engines I VL 2
14											Mechanics IV VL 3	Internal Combustion Engines I HÜ 1
15	Electrical Engineering I	Mathematical Analysis	Mechanics III (GES)	Mechanics IV UE 2	Advanced Mechanical Engineering Design (part 1)	Electrical Machines						
16								Electrical Engineering I VL 3	Mechanics III HÜ 1	Mechanics IV HÜ 1	Advanced Mechanical Engineering Design I VL 2	Electrical Machines VL 3
17								Electrical Engineering I UE 2	Mathematical Analysis HÜ 2	Mechanics III UE 2	Advanced Mechanical Engineering Design I HÜ 2	Electrical Machines HÜ 2
18									Mathematical Analysis UE 2	Mechanics III VL 3		
19											Heat Transfer	
20											Heat Transfer VL 3	
21											Heat Transfer HÜ 2	
22	Mechanics I (GES)	Electrical Engineering II	Computer Engineering	Signals and Systems VL 3	Signals and Systems	Renewables and Energy Systems						
23								Mechanics I HÜ 3	Electrical Engineering II UE 2	Computer Engineering UE 1	Signals and Systems HÜ 1	Reciprocating Machinery (part 1)
					Fundamentals of Reciprocating Engines VL 1	Renewable Energy VL 2	Bachelor Thesis					
						Energy Systems and Energy Industry VL 2						
						Power Industry VL 1						

					and Turbomachinery - Part Reciprocating Engines Fundamentals of Reciprocating Engines and Turbomachinery - Part Reciprocating Engines	Renewable Energy	UE 1	
24								
25								
26								
27								
28	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					
29	Physics for Engineers (GES) Physics for Engineers VL 2 Physics for Engineers UE 1							
30								
31								
32								
33					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.