

Course of Study General Engineering Science (English program, 7 semester) (Study Cohort w17)

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	Form	Semester 2	Form	Semester 3	Form	Semester 4	Form	Semester 5	Form	Semester 6	Form	Semester 7	Form							
1	Chemistry (GES)	VL 2	Technical Thermodynamics I	VL 2	Technical Thermodynamics II	VL 2	Mechanical Engineering: Design (part 2)	PBL2	Introduction to Control Systems	VL 2	Foundations of Management	VL 3	Advanced Internship AIW/ GES								
2															Chemistry I	Technical Thermodynamics I	Technical Thermodynamics II	Team Project Design Methodology	Introduction to Control Systems	Introduction to Management	
3															Chemistry II	Technical Thermodynamics I	Technical Thermodynamics II	Mechanical Design Project II	Introduction to Control Systems	Management Tutorial	
4															Chemistry I	Technical Thermodynamics I	Technical Thermodynamics II				
5															Chemistry II	Technical Thermodynamics I	Technical Thermodynamics II				
6																					
7	Linear Algebra	VL 4	Mathematical Analysis	VL 4	Mathematics III	VL 2	Fluid Dynamics	VL 3	Measurement Technology for Mechanical and Process Engineers	VL 2	Advanced Mechanical Engineering Design (part 2)	VL 2									
8															Linear Algebra	Mathematical Analysis	Analysis III	Fluid Mechanics	Fluid Mechanics	Measurement Technology for Mechanical and Process Engineers	Advanced Mechanical Engineering Design II
9															Linear Algebra	Mathematical Analysis	Analysis III	Fluid Mechanics	Fluid Mechanics	Measurement Technology for Mechanical and Process Engineers	Advanced Mechanical Engineering Design II
10															Linear Algebra	Mathematical Analysis	Analysis III	Differential Equations 1	Differential Equations 1	Measurement Technology for Mechanical and Process Engineers	Advanced Mechanical Engineering Design II
11																		Differential Equations 1	Differential Equations 1	Measurement Technology for Mechanical and Process Engineers	Advanced Mechanical Engineering Design II
12																		Differential Equations 1	Differential Equations 1	Measurement Technology for Mechanical and Process Engineers	Advanced Mechanical Engineering Design II
13	Electrical Engineering I	VL 3	Electrical Engineering II	VL 3	Mechanics III (GES)	HÜ 1	Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)	VL 3	Advanced Mechanical Engineering Design (part 1)	VL 2	Electrical Machines and Actuators	VL 3									
14															Electrical Engineering I	Electrical Engineering II	Mechanics III	Mechanics IV	Mechanics IV	Advanced Mechanical Engineering Design I	Electrical Machines and Actuators
15															Electrical Engineering I	Electrical Engineering II	Mechanics III	Mechanics IV	Mechanics IV	Advanced Mechanical Engineering Design I	Electrical Machines and Actuators
16																					
17																					
18																					
19																					
20																					
21	Mechanics I (GES)	VL 2	Mechanics II (GES)	VL 2	Computer Engineering	VL 3	Signals and Systems	VL 3	Heat Transfer	VL 3	Reciprocating Machinery	VL 2									
22															Mechanics I	Mechanics II	Computer Engineering	Signals and Systems	Heat Transfer	Reciprocating Machinery	

23	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 and Energy Industry VL 2 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 (GES) Fundamentals of Mechanical Engineering VL 2	Mechanical Engineering: Design (part 1) Embodiment Design and 3D-CAD VL 2 Mechanical Design Project I PBL3		Computational Fluid Dynamics I Computational Fluid Dynamics I VL 2 Computational Fluid Dynamics I HÜ 2		
29	Physics for Engineers (GES)						
30	Physics for Engineers VL 2	Fundamentals of Mechanical Engineering UE 2					
31	Physics for Engineers UE 1						
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.