

# Course of Study General Engineering Science (English program, 7 semester) (Study Cohort w18)

Sample course plan B Bachelor General Engineering Science (English program, 7 semester) (GESBS(7))  
Specialisation Mechanical Engineering, Focus Theoretical Mechanical 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	Semester 2	Form	Semester 3	Form	Semester 4	Form	Semester 5	Form	Semester 6	Form	Semester 7	Form						
1	<b>Chemistry (GES)</b>	VL 2	<b>Technical Thermodynamics I</b>	VL 2	<b>Technical Thermodynamics II</b>	VL 2	<b>Mechanical Engineering: Design (part 2)</b>	PBL2	<b>Computer Engineering</b>	VL 3	<b>Foundations of Management</b>	VL 3	<b>Advanced Internship AIW/ GES</b>	Form						
2															Chemistry I	Technical Thermodynamics I	Technical Thermodynamics II	Team Project Design Methodology	Computer Engineering VL 3	Introduction to Management
3															Chemistry II	Technical Thermodynamics I	Technical Thermodynamics II	Mechanical Design Project II	Computer Engineering UE 1	Management Tutorial
4															Chemistry I	Technical Thermodynamics I	Technical Thermodynamics II			
5															Chemistry II	Technical Thermodynamics I	Technical Thermodynamics II			
6																				
7	<b>Linear Algebra</b>	VL 4	<b>Mathematical Analysis</b>	VL 4	<b>Mathematics III</b>	VL 2	<b>Advanced Mechanical Engineering Design (part 2)</b>	VL 2	<b>Introduction to Control Systems</b>	VL 2	<b>Mathematics IV</b>	VL 2	Form							
8														Linear Algebra	Mathematical Analysis	Analysis III	Advanced Mechanical Engineering Design II	Introduction to Control Systems	Complex Functions	
9														Linear Algebra	Mathematical Analysis	Analysis III	Advanced Mechanical Engineering Design II	Introduction to Control Systems	Complex Functions	
10														Linear Algebra	Mathematical Analysis	Differential Equations 1	Fluid Dynamics	Introduction to Control Systems	Differential Equations 2	
11																Differential Equations 1	Fluid Mechanics		Differential Equations 2	
12																Differential Equations 1	Fluid Mechanics		Differential Equations 2	
13	<b>Electrical Engineering I</b>	VL 3	<b>Electrical Engineering II</b>	VL 3	<b>Mechanics III (GES)</b>	HÜ 1	<b>Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)</b>	VL 3	<b>Measurement Technology for Mechanical Engineers</b>	VL 2	<b>Fundamentals of Production and Quality Management</b>	VL 2	Form							
14														Electrical Engineering I	Electrical Engineering II	Mechanics III	Mechanics IV	Measurement Technology for Mechanical Engineering	Production Process Organization	
15														Electrical Engineering I	Electrical Engineering II	Mechanics III	Mechanics IV	Measurement Technology for Mechanical Engineering	Quality Management	
16														Electrical Engineering I	Electrical Engineering II	Mechanics III	Mechanics IV	Measurement Technology for Mechanical Engineering		
17														Electrical Engineering I	Electrical Engineering II	Mechanics III	Mechanics IV	Measurement Technology for Mechanical Engineering		
18														Electrical Engineering I	Electrical Engineering II	Mechanics III	Mechanics IV	Measurement Technology for Mechanical Engineering		
19	<b>Mechanics I (GES)</b>	VL 2	<b>Mechanics II (GES)</b>	VL 2	<b>Mechanical Engineering: Design (part 1)</b>	VL 2	<b>Signals and Systems</b>	VL 3	<b>Advanced Mechanical Design Project</b>	PBL4	<b>Modeling, Simulation and Optimization (GES)</b>	IV 4	Form							
20														Mechanics I	Mechanics II	Embodiment Design	Signals and Systems	Advanced Mechanical Design Project	Modeling, Simulation and Optimization	
21														Mechanics I	Mechanics II	Embodiment Design	Signals and Systems	Advanced Mechanical Design Project	Modeling, Simulation and Optimization	
22														Mechanics I	Mechanics II	Embodiment Design	Signals and Systems	Advanced Mechanical Design Project	Modeling, Simulation and Optimization	
23	Mechanics I	Mechanics II	Embodiment Design	Signals and Systems	Advanced Mechanical Design Project	Modeling, Simulation and Optimization														

	Mechanics I	HÜ 3	Mechanics II	HÜ 2	and 3D-CAD Mechanical Design PBL3 Project I	Signals and Systems	UE 2			
24										
25					<b>Fundamentals of Materials Science (part 1)</b>					
26					Fundamentals of Materials Science I					
27	<b>Programming in C</b> Programming in C Programming in C	VL 1 PR 1	<b>Fundamentals of Mechanical Engineering (GES)</b> Fundamentals of Mechanical Engineering	VL 2	Physical and Chemical Basics of Materials Science					
28										
29	<b>Physics for Engineers (GES)</b> Physics for Engineers Physics for Engineers	VL 2 UE 1	Fundamentals of Mechanical Engineering	UE 2	<b>Advanced Mechanical Engineering Design (part 1)</b> Advanced Mechanical Engineering Design I Advanced Mechanical Engineering Design I	VL 2 HÜ 2				
30										
31										
32										
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.