

Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w21)

Sample course plan B Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))

Specialisation: Mechanical Engineering, Focus: Theoretical Mechanical Engineering

Specialisation: Mechanical Engineering				Focus: Theoretical Mechanical Engineering				FormHrs/wk	Semester 4	FormHrs/wk	Semester 5	FormHrs/wk	Semester 6	FormHrs/wk	Semester 7	FormHrs/wk								
1	Chemistry			Electrical Engineering II: Alternating Current Networks and Basic Devices			Technical Thermodynamics II			Signals and Systems			Introduction to Control Systems			Foundations of Management			Advanced Internship AIW/ ES					
2	Chemistry I+II	VL	4		Electrical Engineering II: Alternating	VL	3	Technical Thermodynamics II	VL	2	Signals and Systems	VL	3	Introduction to Control Systems	VL	2	Introduction to Management	VL	3	Advanced Internship AIW/ ES: Preparation	SE	1		
3	Chemistry I+II	HÜ	2		Current Networks and Basic Devices			Technical Thermodynamics II	GÜ	1	Signals and Systems	GÜ	2	Introduction to Control Systems	GÜ	2	Management Tutorial	GÜ	2		Advanced Intenship AIW/ ES: Internship-accompanying Seminar	SE	1	
4					Electrical Engineering II: Alternating	GÜ	2																	
5					Current Networks and Basic Devices																			
6																								
7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields			Fundamentals of Mechanical Engineering Design			Mathematics III			Fluid Dynamics			Measurement Technology for Mechanical Engineers			Modeling, Simulation and Optimization (EN)								
8	Electrical Engineering I: Direct Current	VL	3		Fundamentals of Mechanical Engineering	VL	2	Analysis III	VL	2	Fluid Mechanics	VL	3	Measurement Technology for Mechanical	VL	2	Modeling, Simulation and Optimization	IV	4					
9	Networks and Electromagnetic Fields				Design	HÜ	1	Analysis III	GÜ	1	Fluid Mechanics	HÜ	2	Engineering										
10	Electrical Engineering I: Direct Current	GÜ	2		Fundamentals of Mechanical Engineering	HÜ	2	Differential Equations 1	VL	2				Measurement Technology for Mechanical	HÜ	1								
11	Networks and Electromagnetic Fields				Design			Differential Equations 1	GÜ	1				Engineering										
12								Differential Equations 1	HÜ	1				Practical Course: Measurement and	PR	2								
13	Mathematics I			Technical Thermodynamics I			Engineering Mechanics III (Dynamics)			Computational Mechanics			Numerical Mathematics I			Electrical Machines and Actuators								
14	Linear Algebra I	VL	2		Technical Thermodynamics I	VL				2	Computational Multibody Dynamics	IV	2	Numerical Mathematics I	VL	2	Electrical Machines and Actuators	VL	3					
15	Linear Algebra I	GÜ	1		Technical Thermodynamics I	HÜ				1	Computational Mechanics	GÜ	2	Numerical Mathematics I	GÜ	2	Electrical Machines and Actuators	HÜ	2					
16	Linear Algebra I	HÜ	1		Technical Thermodynamics I	GÜ				1	Computational Stuctural Mechanics	IV	2											
17	Analysis I	VL	2																					
18	Analysis I	GÜ	1					Engineering Mechanics III	GÜ	2														
19	Analysis I	HÜ	1					Engineering Mechanics III	HÜ	1														
20					Mechanics II: Mechanics of Materials			Advanced Mechanical Engineering Design (part 1)			Advanced Mechanical Engineering Design (part 2)			Heat Transfer			Machine Learning I			Bachelor Thesis				
21	Mechanics I (Statics)			Mechanics II	VL	2	Advanced Mechanical Engineering				VL	2	Heat Transfer	VL	3	Machine Learning I	VL	2						
22	Mechanics I	GÜ	2	Mechanics II	HÜ	2	Design I						Heat Transfer	HÜ	2	Machine Learning I	GÜ	2						
23	Mechanics I	HÜ	1				Advanced Mechanical Engineering				HÜ	2												
24							Design I						Mechanical Engineering: Design (part 2)											
25							Team Project Design Methodology				PBL	2	Fundamentals of Materials Science (part 2)			Computer Science for Engineers -			Programming Concepts, Data Handling & Communication					
26					Mathematics II			Mechanical Engineering: Design (part 1)			Fundamentals of Materials Science II			VL	2	Computer Science for Engineers -			VL			3		
27	Computer Science for Engineers - Introduction and Overview			Linear Algebra II	VL	2	Embodiment Design and 3D-CAD	VL	2				Programming Concepts, Data Handling & Communication											
28	Computer Science for Engineers -	VL	3	Linear Algebra II	GÜ	1	Introduction and Practical Training						Computer Science for Engineers -			GÜ			2					
29	Introduction and Overview			Analysis II	HÜ	1	Mechanical Design Project I	PBL	3				Introduction and Overview											
30	Computer Science for Engineers -	GÜ	2	Analysis II	GÜ	1																		
31	Introduction and Overview																							
32																								
Non-technical 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.

