

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

Sample course plan C Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))
Specialisation Mechanical Engineering, Focus Mechatronics

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	VL 2	Electrical Engineering II: Alternating Current Networks and Basic Devices	VL 3	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 II		Team Project Design Methodology		Introduction to Control Systems		Introduction to Management					
3															Chemistry II		Electrical Engineering II: Alternating Current Networks and Basic Devices		Technical Thermodynamics II		Mechanical Design Project II		Introduction to Control Systems		Management Tutorial			
															Chemistry I													
																			Technical Thermodynamics II		Fundamentals of Materials Science (part 2)							
															Chemistry II							Fundamentals of Materials Science II						
4																												
5			Electrical Engineering II: Alternating Current Networks and Basic Devices	UE 2																								
6							Advanced Mechanical Engineering Design (part 2)		Computer Engineering		Semiconductor Circuit Design																	
7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	VL 3	Fundamentals of Mechanical Engineering Design	VL 2	Mathematics III	VL 2	Advanced Mechanical Engineering Design II	VL 2		Computer Engineering		VL 3			Semiconductor Circuit Design	VL 3												
8																				Computer Engineering	UE 1	Semiconductor Circuit Design	UE 1					
9																												
10																												
11																												
12																												
13	Mathematics I	VL 2	Technical Thermodynamics I	VL 2	Mechanics III (Hydrostatics, Kinematics, Kinetics I)	VL 3	Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)	VL 3	Measurement Technology for Mechanical Engineers	VL 2	Mathematics IV	VL 2																
14															Linear Algebra I		Technical Thermodynamics I		Mechanics III		Mechanics IV		Measurement		Complex Functions			
15															Linear Algebra I				Mechanics III		Mechanics IV		Technology for Mechanical Engineering		Complex Functions			
16															Linear Algebra I				Mechanics III		Mechanics IV		Engineering		Complex Functions			
17															Analysis I				Mechanics III		Mechanics IV		Measurement		Differential Equations			
18															Analysis I				Mechanics III		Mechanics IV		Technology for Mechanical Engineering		Differential Equations			
19									Practical Course: Measurement and Control Systems	PR 2	Differential Equations																	
20											Differential Equations																	
21	Mechanics I (Statics)	VL 2	Mechanics II: Mechanics of Materials	VL 2	Mechanical Engineering: Design (part 1)	VL 3	Signals and Systems	VL 3	Electrical Engineering III: Circuit Theory and Transients	VL 3	Advanced Materials	VL 2	Bachelor Thesis															
22															Mechanics I		Mechanics II		Signals and Systems		Circuit Theory		Advanced Materials					

23	Mechanics I Mechanics I	UE 2 HÜ 1	Mechanics II	HÜ 2	Embodiment Design and 3D-CAD Mechanical Design Project I	VL 2 PBL3	Signals and Systems	UE 2	Circuit Theory	UE 2	Design Advanced Materials Design	HÜ 2
24												
25												
26												
27	Programming in C Programming in C Programming in C	VL 1 VL 1 PR 1	Mathematics II Linear Algebra II Linear Algebra II Linear Algebra II	VL 2 UE 1 HÜ 1	Fundamentals of Materials Science (part 1) Fundamentals of Materials Science I Physical and Chemical Basics of Materials Science	VL 2 VL 2 VL 2			Simulation and Design of Mechatronic Systems Simulation and Design of Mechatronic Systems Simulation and Design of Mechatronic Systems Simulation and Design of Mechatronic Systems	VL 2 VL 2 HÜ 1 PR 1		
28			Analysis II	VL 2								
29			Analysis II	HÜ 1								
30	Physics for Engineers (AIW) Physics for Engineers Physics for Engineers	VL 2 UE 1	Analysis II	UE 1	Advanced Mechanical Engineering Design (part 1) Advanced Mechanical Engineering Design I Advanced Mechanical Engineering Design I	VL 2 HÜ 2						
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.