

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

Sample course plan C Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))
Specialisation Mechanical Engineering, Focus Aircraft Systems 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	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	Computer Engineering	VL 3	Foundations of Management	VL 3	Advanced Internship AIW/GES													
2															Chemistry I	HÜ 1	Electrical Engineering II: Alternating Current Networks and Basic Devices	UE 1	Technical Thermodynamics II	HÜ 1	Team Project Design Methodology	PBL2	Computer Engineering UE 1	Introduction to Management	HÜ 2	
3															Chemistry II	HÜ 1	Electrical Engineering II: Alternating Current Networks and Basic Devices	UE 2	Technical Thermodynamics II	UE 1	Mechanical Design Project II	PBL3		Management Tutorial		
4															Chemistry I											
5															Chemistry II											
6																										
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 (part 2)	VL 2	Introduction to Control Systems	VL 2	Integrated Product Development and Lightweight Design	VL 2														
8															Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	HÜ 2	Fundamentals of Mechanical Engineering Design	HÜ 1	Analysis III	HÜ 1	Advanced Mechanical Engineering Design II	HÜ 2	Introduction to Control Systems	UE 2	Integrated Product Development I	VL 2
9															Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	UE 2	Fundamentals of Mechanical Engineering Design	UE 1	Analysis III	UE 1	Advanced Mechanical Engineering Design II	HÜ 2	Introduction to Control Systems		Development of Lightweight Design Products	VL 2
10																			Differential Equations 1	UE 1					CAE-Team Project	PBL2
11																			Differential Equations 1	HÜ 1						
12																			Differential Equations 1	HÜ 1						
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 and Process Engineers	VL 2	Aeronautical Systems	VL 2														
14															Linear Algebra I	HÜ 1	Technical Thermodynamics I	HÜ 1	Mechanics III	VL 3	Mechanics IV	VL 3	Measurement Technology for Mechanical and Process Engineers	UE 1	Air Transportation Systems	VL 2
15															Linear Algebra I	UE 1	Technical Thermodynamics I	UE 1	Mechanics III	UE 2	Mechanics IV	UE 2	Measurement Technology for Mechanical and Process Engineers	HÜ 1	Fundamentals of Aircraft Systems	VL 2
16															Linear Algebra I	HÜ 1	Technical Thermodynamics I	HÜ 1	Mechanics III	HÜ 1	Mechanics IV	UE 2	Measurement Technology for Mechanical and Process Engineers		Fundamentals of Aircraft Systems	UE 1
17															Analysis I	VL 2	Technical Thermodynamics I	UE 1	Mechanics III	UE 2	Mechanics IV	UE 2	Measurement Technology for Mechanical and Process Engineers	HÜ 1	Air Transportation Systems	HÜ 1
18															Analysis I	UE 1	Technical Thermodynamics I	HÜ 1	Mechanics III	HÜ 1	Mechanics IV	HÜ 1	Measurement Technology for Mechanical and Process Engineers			
19																										
20			Mechanics II: Mechanics of Materials						Advanced Mechanical Design Project		Advanced Materials	VL 2	Bachelor Thesis													
21	Mechanics I (Statics)		Mechanics II	VL 2	Mechanical Engineering:		Signals and Systems		Advanced Mechanical	PBL4	Characterization															

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