

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 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	Introduction to Control Systems	VL 2	Foundations of Management	VL 3	Advanced Internship AIW/GES													
2															Chemistry I	HÜ 1	Electrical Engineering II: Alternating Current Networks and Basic Devices	HÜ 1	Technical Thermodynamics II	HÜ 1	Team Project Design Methodology	UE 2	Introduction to Control Systems	UE 2	Management Tutorial	UE 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		Introduction to Control Systems		Management Tutorial	
4															Chemistry I		Electrical Engineering II: Alternating Current Networks and Basic Devices		Technical Thermodynamics II							
5															Chemistry II		Electrical Engineering II: Alternating Current Networks and Basic Devices		Technical Thermodynamics II		Fundamentals of Materials Science (part 2)					
6															Chemistry II		Electrical Engineering II: Alternating Current Networks and Basic Devices		Technical Thermodynamics II		Fundamentals of Materials Science II	VL 2				
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	Computer Engineering	VL 3	Integrated Product Development and Lightweight Design	VL 2														
8														Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	HÜ 2	Mathematics III	HÜ 1	Advanced Mechanical Engineering Design II	HÜ 2	Computer Engineering	UE 1	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	Differential Equations 1	UE 1	Advanced Mechanical Engineering Design II	HÜ 2	Computer Engineering	UE 1	Development of Lightweight Design Products	VL 2	
10														Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Fundamentals of Mechanical Engineering Design		Differential Equations 1		Fluid Dynamics				CAE-Team Project	PBL2	
11														Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Fundamentals of Mechanical Engineering Design		Differential Equations 1	HÜ 1	Fluid Mechanics	VL 3					
12														Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Fundamentals of Mechanical Engineering Design		Differential Equations 1	HÜ 1	Fluid Mechanics	HÜ 2					
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	Aeronautical Systems	VL 2														
14														Linear Algebra I	UE 1	Technical Thermodynamics I	HÜ 1	Mechanics III	UE 2	Mechanics IV	UE 2	Measurement Technology for Mechanical Engineers	UE 1	Air Transportation Systems	VL 2	
15														Linear Algebra I	HÜ 1	Technical Thermodynamics I	HÜ 1	Mechanics III	UE 2	Mechanics IV	UE 2	Technology for Mechanical Engineering	UE 1	Fundamentals of Aircraft Systems	VL 2	
16														Linear Algebra I	UE 1	Technical Thermodynamics I	UE 1	Mechanics III	HÜ 1	Mechanics IV	HÜ 1	Measurement Technology for Mechanical Engineers	HÜ 1	Fundamentals of Aircraft Systems	UE 1	
17														Analysis I	UE 1	Technical Thermodynamics I	UE 1	Mechanics III	HÜ 1	Mechanics IV	HÜ 1	Measurement Technology for Mechanical Engineers	HÜ 1	Air Transportation Systems	HÜ 1	
18														Analysis I	HÜ 1	Technical Thermodynamics I	HÜ 1	Mechanics III	HÜ 1	Mechanics IV	HÜ 1	Practical Course: Measurement and Control Systems	PR 2			
19	Mechanics I (Statics)	VL 2	Mechanics II: Mechanics of Materials	VL 2	Mechanical Engineering: Design (part 1)	VL 3	Signals and Systems	VL 3	Advanced Mechanical Design Project	PBL4	Advanced Materials	VL 2	Bachelor Thesis													
20														Mechanics I	UE 2	Mechanics II	UE 2	Signals and Systems	VL 3	Design Project	Advanced Materials	VL 2				
21														Mechanics I	UE 2	Mechanics II	UE 2	Signals and Systems	VL 3	Design Project	Advanced Materials	VL 2				
22	Mechanics I	VL 2	Mechanics II	UE 2	Mechanical Engineering: Design (part 1)	VL 3	Signals and Systems	VL 3	Design Project	PBL4	Advanced Materials	VL 2														

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		Design Advanced Materials Design	HÜ 2
24											
25											
26											
27	Programming in C Programming in C Programming in C	VL 1 PR 1	Mathematics II Linear Algebra II Linear Algebra II Linear Algebra II	HÜ 1 HÜ 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 HÜ 1 PR 1
28											
29	Physics for Engineers (AIW) Physics for Engineers Physics for Engineers	VL 2 UE 1	Analysis II Analysis II	HÜ 1 UE 1	Advanced Mechanical Engineering Design (part 1) 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.