

Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w20)

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 hrs/Week	Semester 2	Form hrs/Week	Semester 3	Form hrs/Week	Semester 4	Form hrs/Week	Semester 5	Form hrs/Week	Semester 6	Form hrs/Week	Semester 7	Form hrs/Week
1	Chemistry Chemistry I+II Chemistry I+II	VL 4	Electrical Engineering II: Alternating Current Networks and Basic Devices Electrical Engineering II: Alternating Current Networks and Basic Devices Electrical Engineering II: Alternating Current Networks and Basic Devices	VL 3	Technical Thermodynamics II Technical Thermodynamics II Technical Thermodynamics II Technical Thermodynamics II	VL 2	Signals and Systems Signals and Systems Signals and Systems	VL 3	Introduction to Control Systems Introduction to Control Systems Introduction to Control Systems	VL 2	Foundations of Management Introduction to Management Management Tutorial	VL 3	Advanced Internship AIW/GES	
2		HÜ 2		UE 2		HÜ 1		UE 2		UE 2		UE 2		
3														
4														
5														
6														
7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields Electrical Engineering I: Direct Current Networks and Electromagnetic Fields Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	VL 3	Fundamentals of Mechanical Engineering Design Fundamentals of Mechanical Engineering Design Fundamentals of Mechanical Engineering Design	VL 2	Mathematics III Analysis III Analysis III Analysis III Differential Equations 1 Differential Equations 1 Differential Equations 1	VL 2	Fluid Dynamics Fluid Mechanics Fluid Mechanics	VL 3	Measurement Technology for Mechanical Engineers Measurement Technology for Mechanical Engineering Measurement Technology for Mechanical Engineering Practical Course: Measurement and Control Systems	VL 2	Integrated Product Development and Lightweight Design Integrated Product Development I Development of Lightweight Design Products CAE-Team Project	VL 2		
8		UE 2		UE 1		UE 1		UE 1		UE 1		PBL2		
9														
10														
11														
12														
13	Mathematics I Linear Algebra I Linear Algebra I Linear Algebra I Analysis I Analysis I Analysis I	VL 2	Technical Thermodynamics I Technical Thermodynamics I Technical Thermodynamics I Technical Thermodynamics I	VL 2	Mechanics III (Dynamics) Mechanics III Mechanics III Mechanics III	VL 3	Mechanics IV (Oscillations, Analytical Mechanics, Multibody Systems, Numerical Mechanics) Mechanics IV Mechanics IV Mechanics IV	VL 3	Advanced Mechanical Design Project Advanced Mechanical Design Project	PBL4	Aeronautical Systems Air Transportation Systems Fundamentals of Aircraft Systems Fundamentals of Aircraft Systems Air Transportation Systems	VL 2		
14		UE 1		HÜ 1		VL 3		VL 3				VL 2		
15		HÜ 1		HÜ 1		UE 2		UE 2				VL 2		
16		VL 2		UE 1		UE 2		UE 2				UE 1		
17		UE 1		UE 1		HÜ 1		HÜ 1				HÜ 1		
18		HÜ 1												
19	Mechanics I (Statics) Mechanics I Mechanics I Mechanics I	VL 2	Mechanics II: Mechanics of Materials Mechanics II Mechanics II Mechanics II	VL 2	Advanced Mechanical Engineering Design (part 1) Advanced Mechanical Engineering Design I	VL 2	Advanced Mechanical Engineering Design (part 2) Advanced Mechanical Engineering Design II Advanced Mechanical Engineering Design II	VL 3	Computer Engineering Computer Engineering Computer Engineering	VL 3	Fundamentals of Production and Quality Management Production Process Organization Quality Management	VL 2	Bachelor Thesis	
20		UE 2		UE 2		UE 2		UE 2		UE 1		VL 2		
21		UE 2		HÜ 2		VL 2		HÜ 2				VL 2		
		HÜ 1												

22			Advanced Mechanical HÜ 2									
23			Engineering Design I							Mechanical Engineering: Design (part 2)		
24			Mechanical Engineering: Design (part 1)							Team Project Design PBL2 Methodology		
			Embodiment Design VL 2 and 3D-CAD							Mechanical Design PBL3 Project II		
25			Mathematics II							Mechanical Design PBL3 Project I	Fundamentals of Materials Science (part 2)	Simulation and Design of Mechatronic Systems
26										Linear Algebra II VL 2	Fundamentals of VL 2 Materials Science II	
	Linear Algebra II UE 1											
27	Programming in C	Analysis II VL 2	Fundamentals of Materials Science (part 1)	Simulation and Design HÜ 1 of Mechatronic Systems								
28					Programming in C VL 1	Fundamentals of VL 2 Materials Science I						
					Programming in C PR 1	Physical and Chemical VL 2 Basics of Materials Science						
29	Physics for Engineers (AIW)	Analysis II UE 1		Simulation and Design PR 1 of Mechatronic Systems								
30					Physics for Engineers VL 2							
31					Physics for Engineers UE 1							
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.