

# 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 Product Development and Production

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	<b>Chemistry</b>	VL 2	<b>Electrical Engineering II: Alternating Current Networks and Basic Devices</b>	VL 3	<b>Technical Thermodynamics II</b>	VL 2	<b>Mechanical Engineering: Design (part 2)</b>	PBL2	<b>Computer Engineering</b>	VL 3	<b>Foundations of Management</b>	VL 3	<b>Advanced Internship AIW/GES</b>															
2															Chemistry I		Technical Thermodynamics II		Team Project Design Methodology		Computer Engineering UE 1		Introduction to Management					
3															Chemistry II	VL 2	Electrical Engineering II: Alternating Current Networks and Basic Devices		Technical Thermodynamics II	HÜ 1	Mechanical Design Project II	PBL3		Management Tutorial	HÜ 2			
4															Chemistry I	HÜ 1			Technical Thermodynamics II	UE 1								
5															Chemistry II	HÜ 1		Electrical Engineering II: Alternating Current Networks and Basic Devices	UE 2	Technical Thermodynamics II		<b>Fundamentals of Materials Science (part 2)</b>	VL 2					
6																						<b>Advanced Mechanical Engineering Design (part 2)</b>						
7	<b>Electrical Engineering I: Direct Current Networks and Electromagnetic Fields</b>	VL 3	<b>Fundamentals of Mechanical Engineering Design</b>	VL 2	<b>Mathematics III</b>	VL 2	<b>Advanced Mechanical Engineering Design (part 2)</b>	VL 2	<b>Introduction to Control Systems</b>	VL 2	<b>Integrated Product Development and Lightweight Design</b>	VL 2																
8															Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Analysis III	UE 1	Advanced Mechanical Engineering Design II		Introduction to Control Systems		Integrated Product Development I					
9																	Fundamentals of Mechanical Engineering Design	HÜ 2	Analysis III	HÜ 1	Advanced Mechanical Engineering Design II	HÜ 2	Introduction to Control Systems	UE 2	Development of Lightweight Design Products	VL 2		
10															Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	UE 2	Fundamentals of Mechanical Engineering Design		Differential Equations 1	UE 1	<b>Production Engineering (part 2)</b>				CAE-Team Project	PBL2		
11																			Differential Equations 1	HÜ 1	Production Engineering II	VL 2						
12							Production Engineering II	HÜ 1																				
13	<b>Mathematics I</b>	VL 2	<b>Technical Thermodynamics I</b>	VL 2	<b>Mechanics III (Hydrostatics, Kinematics, Kinetics I)</b>	VL 3	<b>Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)</b>	VL 3	<b>Measurement Technology for Mechanical and Process Engineers</b>	VL 2	<b>Enhanced Fundamentals of Materials Science</b>	VL 2																
14															Linear Algebra I		Technical Thermodynamics I		Mechanics III	UE 2	Mechanics IV		Enhanced Fundamentals: Metals					
15															Linear Algebra I	UE 1			Mechanics III	HÜ 1	Mechanics IV	HÜ 2	Enhanced Fundamentals: Ceramics and Polymers					
16															Linear Algebra I	HÜ 1			Mechanics III	UE 1	Mechanics IV	VL 3	Enhanced Fundamentals: Ceramics and Polymers	HÜ 1				
17															Analysis I	VL 2			Mechanics III	HÜ 1	Mechanics IV	UE 2	Enhanced Fundamentals: Ceramics and Polymers					
18															Analysis I	UE 1			Mechanics III	HÜ 1	Mechanics IV	HÜ 1	Technology for Mechanical and Process Engineers					
18															Analysis I	HÜ 1			Mechanics III	HÜ 1	Mechanics IV	HÜ 1	Measurement					
19			<b>Mechanics II: Mechanics</b>						Practical Course: Measurement and Control Systems	PR 2																		
									<b>Advanced Mechanical</b>		<b>Advanced Materials</b>		<b>Bachelor Thesis</b>															

20		<b>of Materials</b>			<b>Design Project</b>	Advanced Materials	VL 2	
21	<b>Mechanics I (Statics)</b>	Mechanics II	VL 2	<b>Mechanical Engineering: Design (part 1)</b>	Advanced Mechanical Design Project	Advanced Materials Characterization	VL 2	
22		Mechanics II	UE 2			Advanced Materials Design	VL 2	
23		Mechanics I	VL 2			Embodiment Design and 3D-CAD	Advanced Materials Design	HÜ 2
		Mechanics I	UE 2			Mechanical Design Project I		
	Mechanics I	HÜ 1						
24								
25		<b>Mathematics II</b>		<b>Fundamentals of Materials Science (part 1)</b>		<b>Production Technology</b>		
26		Linear Algebra II	VL 2	Fundamentals of Materials Science I	VL 2	Forming and Cutting Technology	VL 2	
27	<b>Programming in C</b>	Linear Algebra II	UE 1	Physical and Chemical Basics of Materials Science	VL 2	Forming and Cutting Technology	HÜ 1	
		Programming in C	VL 1			Fundamentals of Machine Tools	VL 2	
		Programming in C	PR 1	Analysis II	VL 2	Fundamentals of Machine Tools	HÜ 1	
28		Analysis II	HÜ 1					
29	<b>Physics for Engineers (AIW)</b>	Analysis II	UE 1	<b>Advanced Mechanical Engineering Design (part 1)</b>				
30		Physics for Engineers	VL 2	Advanced Mechanical Engineering Design I	VL 2			
		Physics for Engineers	UE 1	Advanced Mechanical Engineering Design I	HÜ 2			
31								
32				<b>Production Engineering (part 1)</b>				
33				Production Engineering I	VL 2			
				Production Engineering I	HÜ 1			

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.