

# Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w16)

Sample course plan C Bachelor General Engineering Science (German program, 7 semester) (AIWS(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	Semester 2	Form/hrs	Semester 3	Form/hrs	Semester 4	Form/hrs	Semester 5	Form/hrs	Semester 6	Form/hrs	Semester 7	Form/hrs/wk						
1	<b>Chemistry</b>	VL 2	<b>Electrical Engineering II: Alternating Current Networks and Basic Devices</b>	VL 2	<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 GES</b>							
2															Chemistry I	Technical Thermodynamics II	Team Project Design Methodology	Computer Engineering	Introduction to Management	
3															Chemistry II	Technical Thermodynamics II	Mechanical Design Project II	Computer Engineering	Management Tutorial	
															Chemistry I	Electrical Engineering II: Alternating Current Networks and Basic Devices	Technical Thermodynamics II			
															Chemistry II	Electrical Engineering II: Alternating Current Networks and Basic Devices	Technical Thermodynamics II			
4	<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								
5															Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	Fundamentals of Mechanical Engineering Design	Analysis III	Advanced Mechanical Engineering Design II	Introduction to Control Systems	Integrated Product Development I
6																	Analysis III	Advanced Mechanical Engineering Design II	Introduction to Control Systems	Development of Lightweight Design Products
7																	Differential Equations 1	Fluid Dynamics	Introduction to Control Systems	Development of Lightweight Design Products
8																	Differential Equations 1	Fluid Mechanics		CAE-Team Project
9																	Differential Equations 1	Fluid Mechanics		
10	<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>Aeronautical Systems</b>	VL 2								
11															Linear Algebra I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Air Transportation Systems
12															Linear Algebra I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Fundamentals of Aircraft Systems
13															Linear Algebra I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Fundamentals of Aircraft Systems
14															Analysis I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Air Transportation Systems
15															Analysis I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Air Transportation Systems
16	Analysis I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Air Transportation Systems														
17	<b>Mechanics I (Statics)</b>	VL 2	<b>Mechanics II</b>	VL 2	<b>Mechanical Engineering: Design (part 1)</b>	VL 2	<b>Signals and Systems</b>	VL 3	<b>Advanced Mechanical Design Project</b>	PBL4	<b>Advanced Materials</b>	VL 2	<b>Bachelor Thesis</b>							
18															Analysis I	Mechanics II	Embodiment Design and 3D-CAD	Signals and Systems	Advanced Mechanical Design Project	Advanced Materials Characterization
19															Analysis I	Mechanics II		Signals and Systems		Advanced Materials Design
20															Analysis I	Mechanics II		Signals and Systems		Advanced Materials Design
21															Analysis I	Mechanics II		Signals and Systems		Advanced Materials Design
22															Analysis I	Mechanics II		Signals and Systems		Advanced Materials Design
23	Analysis I	Mechanics II		Signals and Systems		Advanced Materials Design														

				Mechanical Design Project I	TT 3				Design	
24										
25				<b>Fundamentals of Materials Science (part 1)</b>						
26			<b>Mathematics II</b>							
27			Linear Algebra II	VL 2	Fundamentals of Materials Science I	VL 2				
	<b>Programming in C</b>		Linear Algebra II	UE 1	Physical and Chemical Basics of Materials Science	VL 2				
	Programming in C	VL 1	Linear Algebra II	HÜ 1						
	Programming in C	PR 1	Analysis II	VL 2						
28			Analysis II	HÜ 1						
29			Analysis II	UE 1	<b>Advanced Mechanical Engineering Design (part 1)</b>					
30					Advanced Mechanical Engineering Design I	VL 2				
	<b>Physics for Engineers (AIW)</b>				Advanced Mechanical Engineering Design I	HÜ 2				
	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.