

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

Legend:	Core Qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
	Core Qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

Sample course plan A Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))

Semester	Specialisation Mechanical Engineering	Focus Theoretical Mechanical Engineering	FormHrs/wk	Semester 4	FormHrs/wk	Semester 5	FormHrs/wk	Semester 6	FormHrs/wk	Semester 7	FormHrs/wk
1	<b>Chemistry</b>	<b>Electrical Engineering II: Alternating Current Networks and Basic Devices</b>		<b>Mechanical Engineering: Design (part 2)</b>		<b>Computer Engineering</b>		<b>Foundations of Management</b>		<b>Advanced Internship AIW/ GES</b>	
2	Chemistry I VL 2	Electrical Engineering II: Alternating Current Networks and Basic Devices VL 3		Team Project Design Methodology PBL 2		Computer Engineering VL 3		Introduction to Management VL 3			
3	Chemistry II VL 2	Electrical Engineering II: Alternating Current Networks and Basic Devices VL 3		Mechanical Design Project II PBL 3		Computer Engineering GÜ 1		Management Tutorial HÜ 2			
4	Chemistry I HÜ 1	Electrical Engineering II: Alternating Current Networks and Basic Devices GÜ 2									
5	Chemistry II HÜ 1	Current Networks and Basic Devices		<b>Fundamentals of Materials Science (part 2)</b>							
6				Fundamentals of Materials Science II VL 2							
7	<b>Electrical Engineering I: Direct Current Networks and Electromagnetic Fields</b>	<b>Fundamentals of Mechanical Engineering Design</b>		<b>Advanced Mechanical Engineering Design (part 2)</b>		<b>Introduction to Control Systems</b>		<b>Mathematics IV</b>			
8	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields VL 3	Fundamentals of Mechanical Engineering Design VL 2		Advanced Mechanical Engineering Design II VL 2		Introduction to Control Systems VL 2		Complex Functions VL 2			
9	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields GÜ 2	Fundamentals of Mechanical Engineering Design HÜ 2		Advanced Mechanical Engineering Design II HÜ 2		Introduction to Control Systems GÜ 2		Complex Functions GÜ 1			
10				Design II				Complex Functions HÜ 1			
11				Differential Equations 1 VL 2				Differential Equations 2 VL 2			
12				Differential Equations 1 GÜ 1		<b>Fluid Dynamics</b>		Differential Equations 2 GÜ 1			
13	<b>Mathematics I</b>	<b>Technical Thermodynamics I</b>		Differential Equations 1 HÜ 1		Fluid Mechanics VL 3		Differential Equations 2 HÜ 1			
14	Linear Algebra I VL 2	Technical Thermodynamics I VL 2				Fluid Mechanics HÜ 2					
15	Linear Algebra I GÜ 1	Technical Thermodynamics I HÜ 1		<b>Mechanics III (Hydrostatics, Kinematics, Kinetics I)</b>				<b>Measurement Technology for Mechanical and Process Engineers</b>		<b>Electrical Machines and Actuators</b>	
16	Linear Algebra I HÜ 1	Technical Thermodynamics I GÜ 1		Mechanics III VL 3		<b>Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)</b>		Measurement Technology for Mechanical and Process Engineers VL 2		Electrical Machines and Actuators VL 3	
17	Analysis I VL 2			Mechanics III GÜ 2		Mechanics IV VL 3		Measurement Technology for Mechanical and Process Engineers HÜ 1		Electrical Machines and Actuators HÜ 2	
18	Analysis I GÜ 1			Mechanics III HÜ 1		Mechanics IV GÜ 2		Practical Course: Measurement and Control Systems PR 2			
19	Analysis I HÜ 1					Mechanics IV HÜ 1					
20		<b>Mechanics II: Mechanics of Materials</b>		<b>Mechanical Engineering: Design (part 1)</b>		<b>Signals and Systems</b>		<b>Advanced Mechanical Design Project</b>		<b>Production Engineering (part 2)</b>	
21	<b>Mechanics I (Statics)</b>	Mechanics II VL 2		Embodiment Design and 3D-CAD VL 2		Signals and Systems VL 3		Advanced Mechanical Design Project PBL 4		Production Engineering II VL 2	
22	Mechanics I VL 2	Mechanics II GÜ 2		Mechanical Design Project I PBL 3		Signals and Systems GÜ 2				Production Engineering II HÜ 1	
23	Mechanics I GÜ 2	Mechanics II HÜ 2									
24	Mechanics I HÜ 1			<b>Fundamentals of Materials Science (part 1)</b>				<b>Production Engineering (part 1)</b>			
25		<b>Mathematics II</b>		Fundamentals of Materials Science I VL 2				Production Engineering I VL 2			
26		Linear Algebra II VL 2		Physical and Chemical Basics of Materials Science VL 2				Production Engineering I HÜ 1			
27		Linear Algebra II GÜ 1		Science							
28	<b>Programming in C</b>	Linear Algebra II HÜ 1									
29	Programming in C VL 1	Analysis II VL 2		<b>Advanced Mechanical Engineering Design (part 1)</b>							
30	Programming in C PR 1	Analysis II HÜ 1		Advanced Mechanical Engineering Design I VL 2							
31	<b>Physics for Engineers (AIW)</b>	Analysis II GÜ 1		Design I HÜ 2							
32	Physics for Engineers VL 2			Advanced Mechanical Engineering Design I HÜ 2							
	Physics for Engineers GÜ 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.

