

# Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w21)

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 B Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))

Specialisation: Mechanical Engineering			Focus: Theoretical Mechanical Engineering			Semester 4		Semester 5		Semester 6		Semester 7		
Year	Course	FormHrs/wk	Year	Course	FormHrs/wk	Year	Course	FormHrs/wk	Year	Course	FormHrs/wk	Year	Course	FormHrs/wk
1	<b>Chemistry</b>			<b>Electrical Engineering II: Alternating Current Networks and Basic Devices</b>			<b>Technical Thermodynamics II</b>		<b>Signals and Systems</b>		<b>Introduction to Control Systems</b>		<b>Foundations of Management</b>	
2	Chemistry I+II VL 4		2	Electrical Engineering II: Alternating Current Networks and Basic Devices VL 3		2	Technical Thermodynamics II VL 2		Signals and Systems VL 3		Introduction to Control Systems VL 2		Introduction to Management VL 3	
3	Chemistry I+II HÜ 2		3	Electrical Engineering II: Alternating Current Networks and Basic Devices GÜ 2		3	Technical Thermodynamics II HÜ 1		Signals and Systems GÜ 2		Introduction to Control Systems GÜ 2		Management Tutorial GÜ 2	
4			4	Electrical Engineering II: Alternating Current Networks and Basic Devices		4	Technical Thermodynamics II							
5			5			5								
6			6			6								
7	<b>Electrical Engineering I: Direct Current Networks and Electromagnetic Fields</b>			<b>Fundamentals of Mechanical Engineering Design</b>			<b>Mathematics III</b>		<b>Fluid Dynamics</b>		<b>Measurement Technology for Mechanical Engineers</b>		<b>Modeling, Simulation and Optimization (EN)</b>	
8	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields VL 3		8	Fundamentals of Mechanical Engineering Design VL 2		8	Analysis III VL 2		Fluid Mechanics VL 3		Measurement Technology for Mechanical Engineers VL 2		Modeling, Simulation and Optimization IV 4	
9	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields HÜ 2		9	Fundamentals of Mechanical Engineering Design HÜ 2		9	Analysis III GÜ 1		Fluid Mechanics HÜ 2		Measurement Technology for Mechanical Engineers HÜ 1			
10	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields GÜ 2		10	Fundamentals of Mechanical Engineering Design		10	Differential Equations 1 VL 2				Measurement Technology for Mechanical Engineers GÜ 2			
11			11			11	Differential Equations 1 GÜ 1				Practical Course: Measurement and Control Systems PR 2			
12			12			12	Differential Equations 1 HÜ 1							
13	<b>Mathematics I</b>			<b>Technical Thermodynamics I</b>					<b>Mechanics IV (Oscillations, Analytical Mechanics, Multibody Systems, Numerical Mechanics)</b>		<b>Numerical Mathematics I</b>		<b>Computer Science for Engineers - Programming Concepts, Data Handling &amp; Communication</b>	
14	Linear Algebra I VL 2		14	Technical Thermodynamics I VL 2		14			Mechanics IV VL 3		Numerical Mathematics I VL 2		Computer Science for Engineers - Programming Concepts, Data Handling & Communication VL 3	
15	Linear Algebra I GÜ 1		15	Technical Thermodynamics I HÜ 1		15			Mechanics IV GÜ 2		Numerical Mathematics I GÜ 2		Computer Science for Engineers - Programming Concepts, Data Handling & Communication GÜ 2	
16	Linear Algebra I HÜ 1		16	Technical Thermodynamics I GÜ 1		16	<b>Mechanics III (Dynamics)</b>		Mechanics IV HÜ 1					
17	Analysis I VL 2		17			17	Mechanics III VL 3							
18	Analysis I GÜ 1		18			18	Mechanics III GÜ 2							
19	Analysis I HÜ 1		19			19	Mechanics III HÜ 1							
20			20	<b>Mechanics II: Mechanics of Materials</b>		20			<b>Advanced Mechanical Engineering Design (part 2)</b>		<b>Heat Transfer</b>		<b>Electrical Machines and Actuators</b>	
21	<b>Mechanics I (Statics)</b>		21	Mechanics II VL 2		21			Advanced Mechanical Engineering VL 2		Heat Transfer VL 3		Electrical Machines and Actuators VL 3	
22	Mechanics I VL 2		22	Mechanics II GÜ 2		22			Design II HÜ 2		Heat Transfer HÜ 2		Electrical Machines and Actuators HÜ 2	
23	Mechanics I GÜ 2		23	Mechanics II HÜ 2		23	<b>Advanced Mechanical Engineering Design (part 1)</b>		Advanced Mechanical Engineering HÜ 2					
24	Mechanics I HÜ 1		24			24	Advanced Mechanical Engineering VL 2		Design II					
25			25			25	Design I		Advanced Mechanical Engineering HÜ 2					
26			26	<b>Mathematics II</b>		26	Advanced Mechanical Engineering HÜ 2		Design I					
27	<b>Computer Science for Engineers - Introduction and Overview</b>		27	Linear Algebra II VL 2		27	Design I		Team Project Design Methodology PBL 2					
28	Computer Science for Engineers - Introduction and Overview VL 3		28	Linear Algebra II GÜ 1		28	Advanced Mechanical Engineering HÜ 2		Mechanical Design Project II PBL 3					
29	Computer Science for Engineers - Introduction and Overview GÜ 2		29	Linear Algebra II HÜ 1		29	Embodiment Design and 3D-CAD VL 2							
30	Computer Science for Engineers - Introduction and Overview		30	Linear Algebra II GÜ 1		30	Mechanical Design Project I PBL 3							
31			31	Analysis II VL 2		31			<b>Fundamentals of Materials Science (part 2)</b>				<b>Mathematics IV</b>	
32			32	Analysis II HÜ 1		32			Fundamentals of Materials Science II VL 2				Complex Functions VL 2	
				Analysis II GÜ 1									Complex Functions GÜ 1	
				Analysis II GÜ 1									Complex Functions HÜ 1	
													Differential Equations 2 VL 2	
													Differential Equations 2 GÜ 1	
													Differential Equations 2 HÜ 1	

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.

