

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 A 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
Form	Hrs/wk	Form	Hrs/wk	Form	Hrs/wk	Form	Hrs/wk
1	Chemistry	Electrical Engineering II: Alternating Current Networks and Basic Devices	Technical Thermodynamics II	Signals and Systems	Introduction to Control Systems	Foundations of Management	Advanced Internship AIW/ ES
2	Chemistry I+II VL 4	Electrical Engineering II: Alternating Current Networks and Basic Devices VL 3	Technical Thermodynamics II VL 2	Signals and Systems VL 3	Introduction to Control Systems VL 2	Introduction to Management VL 3	Advanced Internship AIW/ ES: Preparation SE 1
3	Chemistry I+II HÜ 2	Electrical Engineering II: Alternating Current Networks and Basic Devices GÜ 2	Technical Thermodynamics II HÜ 1	Signals and Systems GÜ 2	Introduction to Control Systems GÜ 2	Management Tutorial GÜ 2	Advanced Internship AIW/ ES: Internship-accompanying Seminar SE 1
4							
5							
6							
7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	Fundamentals of Mechanical Engineering Design	Mathematics III	Fluid Dynamics	Measurement Technology for Mechanical Engineers	Modeling, Simulation and Optimization (EN)	
8	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields VL 3	Fundamentals of Mechanical Engineering Design VL 2	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	Fundamentals of Mechanical Engineering Design HÜ 2	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		Analysis III HÜ 1		Measurement Technology for Mechanical Engineers PR 2		
11			Differential Equations 1 VL 2				
12			Differential Equations 1 GÜ 1				
13			Differential Equations 1 HÜ 1				
13	Mathematics I	Technical Thermodynamics I		Mechanics IV (Oscillations, Analytical Mechanics, Multibody Systems, Numerical Mechanics)	Numerical Mathematics I	Computer Science for Engineers - Programming Concepts, Data Handling & Communication	
14	Linear Algebra I VL 2	Technical Thermodynamics I VL 2		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	Technical Thermodynamics I HÜ 1	Mechanics III (Dynamics)	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	Technical Thermodynamics I GÜ 1	Mechanics III VL 3	Mechanics IV HÜ 1			
17	Analysis I VL 2		Mechanics III GÜ 2				
18	Analysis I GÜ 1		Mechanics III HÜ 1				
19	Analysis I HÜ 1						
19		Mechanics II: Mechanics of Materials		Advanced Mechanical Engineering Design (part 2)	Heat Transfer	Mathematics IV	Bachelor Thesis
20		Mechanics II VL 2		Advanced Mechanical Engineering VL 2	Heat Transfer VL 3	Complex Functions VL 2	
21	Mechanics I (Statics)	Mechanics II GÜ 2	Advanced Mechanical Engineering Design (part 1)	Design II HÜ 2	Heat Transfer HÜ 2	Complex Functions GÜ 1	
22	Mechanics I VL 2	Mechanics II HÜ 2	Advanced Mechanical Engineering VL 2	Advanced Mechanical Engineering HÜ 2		Complex Functions HÜ 1	
23	Mechanics I GÜ 2		Design I	Design II		Differential Equations 2 VL 2	
24	Mechanics I HÜ 1		Advanced Mechanical Engineering HÜ 2	Mechanical Engineering: Design (part 2)		Differential Equations 2 GÜ 1	
25			Design I	Team Project Design Methodology PBL 2		Differential Equations 2 HÜ 1	
25		Mathematics II	Mechanical Engineering: Design (part 1)	Mechanical Design Project II PBL 3			
26		Linear Algebra II VL 2	Embodiment Design and 3D-CAD VL 2		Fundamentals of Materials Science (part 1)	Production Engineering (part 1)	Production Engineering (part 2)
27	Computer Science for Engineers - Introduction and Overview	Linear Algebra II GÜ 1	Mechanical Design Project I PBL 3		Fundamentals of Materials Science II VL 2	Production Engineering I VL 2	Production Engineering II VL 2
28	Computer Science for Engineers - Introduction and Overview VL 3	Linear Algebra II HÜ 1				Production Engineering I HÜ 1	Production Engineering II HÜ 1
29	Computer Science for Engineers - Introduction and Overview GÜ 2	Analysis II VL 2	Fundamentals of Materials Science (part 1)				
30	Computer Science for Engineers - Introduction and Overview HÜ 1	Analysis II HÜ 1	Fundamentals of Materials Science I VL 2				
31		Analysis II GÜ 1	Physical and Chemical Basics of Materials Science VL 2				
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.

