

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

Specialisation	Mechanical Engineering	Focus Biomechanics	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7
		FormHrs/wk	FormHrs/wk	FormHrs/wk	FormHrs/wk	FormHrs/wk	FormHrs/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	Advanced Materials	
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	Advanced Materials Characterization VL 2	
9	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields GÜ 2	Fundamentals of Mechanical Engineering Design HÜ 2	Analysis III GÜ 1	Fluid Mechanics HÜ 2	Measurement Technology for Mechanical Engineers HÜ 1	Advanced Materials Design VL 2	
10			Differential Equations 1 VL 2		Measurement Technology for Mechanical Engineers GÜ 2	Advanced Materials Design HÜ 2	
11			Differential Equations 1 GÜ 1		Practical Course: Measurement and Control Systems PR 2		
12			Differential Equations 1 HÜ 1				
13	Mathematics I	Technical Thermodynamics I		Mechanics IV (Oscillations, Analytical Mechanics, Multibody Systems, Numerical Mechanics)	Numerical Mathematics I	MED II: Introduction to Physiology	
14	Linear Algebra I VL 2	Technical Thermodynamics I VL 2		Mechanics IV VL 3	Numerical Mathematics I VL 2	Introduction to Physiology VL 2	
15	Linear Algebra I GÜ 1	Technical Thermodynamics I HÜ 1		Mechanics IV GÜ 2	Numerical Mathematics I GÜ 2		
16	Linear Algebra I HÜ 1	Technical Thermodynamics I GÜ 1	Mechanics III (Dynamics)	Mechanics IV HÜ 1		BIO I: Experimental Methods in Biomechanics	
17	Analysis I VL 2		Mechanics III VL 3			Experimental Methods in Biomechanics VL 2	
18	Analysis I GÜ 1		Mechanics III GÜ 2				
19	Analysis I HÜ 1		Mechanics III HÜ 1				
20		Mechanics II: Mechanics of Materials		MED I: Introduction to Anatomy	MED II: Introduction to Biochemistry and Molecular Biology	Computer Science for Engineers - Programming Concepts, Data Handling & Communication	Bachelor Thesis
21		Mechanics II VL 2		Introduction to Anatomy VL 2	Introduction to Biochemistry and Molecular Biology VL 2	Computer Science for Engineers - Programming Concepts, Data Handling & Communication VL 3	
22	Mechanics I (Statics)	Mechanics II GÜ 2	Advanced Mechanical Engineering Design (part 1)	MED I: Introduction to Radiology and Radiation Therapy	BIO I: Implants and Fracture Healing	Computer Science for Engineers - Programming Concepts, Data Handling & Communication GÜ 2	
23	Mechanics I VL 2	Mechanics II HÜ 2	Advanced Mechanical Engineering Design I VL 2	Introduction to Radiology and Radiation Therapy VL 2	Implants and Fracture Healing VL 2	Computer Science for Engineers - Programming Concepts, Data Handling & Communication	
24	Mechanics I GÜ 2		Advanced Mechanical Engineering Design I HÜ 2				
25	Mechanics I HÜ 1		Mechanical Engineering: Design (part 1)				
26		Mathematics II	Embodiment Design and 3D-CAD VL 2	Advanced Mechanical Engineering Design (part 2)			
27	Computer Science for Engineers - Introduction and Overview	Linear Algebra II VL 2	Mechanical Design Project I PBL 3	Advanced Mechanical Engineering Design II VL 2			
28	Computer Science for Engineers - Introduction and Overview VL 3	Linear Algebra II HÜ 1		Design II HÜ 2			
29	Computer Science for Engineers - Introduction and Overview GÜ 2	Linear Algebra II GÜ 1	Fundamentals of Materials Science (part 1)	Advanced Mechanical Engineering Design II HÜ 2			
30		Analysis II VL 2	Fundamentals of Materials Science I VL 2	Design II GÜ 2			
31		Analysis II HÜ 1	Physical and Chemical Basics of Materials Science VL 2				
32		Analysis II GÜ 1		Mechanical Engineering: Design (part 2)			
				Team Project Design Methodology PBL 2			
				Mechanical Design Project II PBL 3			
					Fundamentals of Materials Science (part 2)		
					Fundamentals of Materials Science II VL 2		

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.

