

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

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	Semester 2		Semester 3		Semester 4		Semester 5		Semester 6		Semester 7	
Biomedical Engineering	Form	Hrs/wk	Form	Hrs/wk	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		Fundamentals of Materials Science (part 2)		Introduction to Control Systems		Foundations of Management	
2	Chemistry I VL 2		Electrical Engineering II: Alternating Current Networks and Basic Devices VL 3		Technical Thermodynamics II VL 2		Fundamentals of Materials Science II VL 2		Introduction to Control Systems VL 2		Introduction to Management VL 3	
3	Chemistry II VL 2		Electrical Engineering II: Alternating Current Networks and Basic Devices GÜ 2		Technical Thermodynamics II HÜ 1		Signals and Systems		Introduction to Control Systems GÜ 2		Management Tutorial HÜ 2	
4	Chemistry I HÜ 1		Electrical Engineering II: Alternating Current Networks and Basic Devices		Technical Thermodynamics II GÜ 1		Signals and Systems VL 3					
5	Chemistry II HÜ 1						Signals and Systems GÜ 2					
6												
7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Fundamentals of Mechanical Engineering Design		Mathematics III		Mechanical Engineering: Design (part 1)		Mechanical Engineering: Design (part 2)		Advanced Internship AIW/ GES	
8	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields VL 3		Fundamentals of Mechanical Engineering Design VL 2		Analysis III VL 2		Embodiment Design and 3D-CAD VL 2		Team Project Design Methodology PBL 2			
9	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields GÜ 2		Fundamentals of Mechanical Engineering Design HÜ 2		Analysis III GÜ 1		Mechanical Design Project I PBL 3		Mechanical Design Project II PBL 3			
10					Analysis III HÜ 1							
11					Differential Equations 1 VL 2		Fluid Dynamics		Numerical Mathematics I		Introduction into Medical Technology and Systems	
12					Differential Equations 1 GÜ 1		Fluid Mechanics VL 3		Numerical Mathematics I VL 2		Introduction into Medical Technology and Systems VL 2	
13	Mathematics I		Technical Thermodynamics I		Differential Equations 1 HÜ 1		Fluid Mechanics HÜ 2		Numerical Mathematics I GÜ 2		Introduction into Medical Technology and Systems P5 2	
14	Linear Algebra I VL 2		Technical Thermodynamics I VL 2								Introduction into Medical Technology and Systems HÜ 1	
15	Linear Algebra I GÜ 1		Technical Thermodynamics I HÜ 1		Mechanics III (Hydrostatics, Kinematics, Kinetics I)		Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)		Heat Transfer		MED II: Introduction to Physiology	
16	Linear Algebra I HÜ 1		Technical Thermodynamics I GÜ 1		Mechanics III VL 3		Mechanics IV VL 3		Heat Transfer VL 3		Introduction to Physiology VL 2	
17	Analysis I VL 2				Mechanics III GÜ 2		Mechanics IV GÜ 2		Heat Transfer HÜ 2			
18	Analysis I GÜ 1				Mechanics III HÜ 1		Mechanics IV HÜ 1				BIO I: Experimental Methods in Biomechanics	Bachelor Thesis
19	Analysis I HÜ 1		Mechanics II: Mechanics of Materials								Experimental Methods in Biomechanics VL 2	
20			Mechanics II VL 2		Computer Engineering		MED I: Introduction to Anatomy		Measurement Technology for Mechanical and Process Engineers			
21	Mechanics I (Statics)		Mechanics II GÜ 2		Computer Engineering VL 3		Introduction to Anatomy VL 2		Measurement Technology for Mechanical and Process Engineers VL 2			
22	Mechanics I VL 2		Mechanics II HÜ 2		Computer Engineering GÜ 1				Measurement Technology for Mechanical and Process Engineers HÜ 1			
23	Mechanics I GÜ 2						MED I: Introduction to Radiology and Radiation Therapy		Measurement Technology for Mechanical and Process Engineers PR 2			
24	Mechanics I HÜ 1		Mathematics II		Fundamentals of Materials Science (part 1)		Introduction to Radiology and Radiation Therapy VL 2		Control Systems			
25			Linear Algebra II VL 2		Fundamentals of Materials Science I VL 2						MED II: Introduction to Biochemistry and Molecular Biology	
26			Linear Algebra II GÜ 1		Fundamentals of Materials Science II VL 2						Introduction to Biochemistry and Molecular Biology VL 2	
27	Programming in C		Linear Algebra II HÜ 1		Physical and Chemical Basics of Materials Science VL 2							
28	Programming in C VL 1		Analysis II VL 2									
29	Programming in C PR 1		Analysis II HÜ 1									
30	Physics for Engineers (AIW)		Analysis II GÜ 1									
31	Physics for Engineers VL 2											
32	Physics for Engineers GÜ 1											
33												

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.

