

Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w18)

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: Materials in Engineering Sciences				Semester 4	Semester 5	Semester 6	Semester 7
Semester	Form	Hrs/wk		Form	Hrs/wk	Form	Hrs/wk
1	Chemistry		Electrical Engineering II: Alternating Current Networks and Basic Devices	Technical Thermodynamics II	Mechanical Engineering: Design (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	Team Project Design Methodology PBL 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 VL 3	Technical Thermodynamics II HÜ 1	Mechanical Design Project II PBL 3	Introduction to Control Systems GÜ 2	Management Tutorial GÜ 2
4	Chemistry I HÜ 1		Electrical Engineering II: Alternating Current Networks and Basic Devices GÜ 2	Technical Thermodynamics II GÜ 1			
5	Chemistry II HÜ 1				Fundamentals of Materials Science (part 2)		
6					Fundamentals of Materials Science II VL 2		
7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Fundamentals of Mechanical Engineering Design	Mathematics III	Advanced Mechanical Engineering Design (part 2)	Computer Engineering	Enhanced Fundamentals of Materials Science
8	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields VL 3		Fundamentals of Mechanical Engineering Design VL 2	Analysis III VL 2	Advanced Mechanical Engineering Design II VL 2	Computer Engineering VL 3	Enhanced Fundamentals: Metals 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	Advanced Mechanical Engineering Design II HÜ 2	Computer Engineering GÜ 1	Enhanced Fundamentals: Ceramics and Polymers VL 2
10				Analysis III HÜ 1			Enhanced Fundamentals: Ceramics and Polymers HÜ 1
11				Differential Equations 1 VL 2	Fluid Dynamics		
12				Differential Equations 1 GÜ 1	Fluid Mechanics VL 3		
13	Mathematics I		Technical Thermodynamics I	Differential Equations 1 HÜ 1	Fluid Mechanics HÜ 2	Measurement Technology for Mechanical Engineers	Structural Materials (part 2)
14	Linear Algebra I VL 2		Technical Thermodynamics I VL 2			Measurement Technology for Mechanical Engineering VL 2	Fundamentals of Mechanical Properties of Materials VL 2
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)	Measurement Technology for Mechanical Engineering HÜ 1	
16	Linear Algebra I HÜ 1		Technical Thermodynamics I GÜ 1	Mechanics III VL 3	Mechanics IV VL 3	Engineering	
17	Analysis I VL 2			Mechanics III GÜ 2	Mechanics IV GÜ 2	Measurement Technology for Mechanical Engineering PR 2	
18	Analysis I GÜ 1			Mechanics III HÜ 1	Mechanics IV HÜ 1	Practical Course: Measurement and Control Systems	
19	Analysis I HÜ 1						
20			Mechanics II: Mechanics of Materials	Mechanical Engineering: Design (part 1)	Signals and Systems	Numerical Mathematics I	Bachelor Thesis
21	Mechanics I (Statics)		Mechanics II VL 2	Embodiment Design and 3D-CAD VL 2	Signals and Systems VL 3	Numerical Mathematics I VL 2	
22	Mechanics I VL 2		Mechanics II GÜ 2	Mechanical Design Project I PBL 3	Signals and Systems GÜ 2	Numerical Mathematics I GÜ 2	
23	Mechanics I GÜ 2		Mechanics II HÜ 2				
24	Mechanics I HÜ 1			Fundamentals of Materials Science (part 1)		Structural Materials (part 1)	
25				Fundamentals of Materials Science I VL 2		Welding Technology VL 3	
26			Mathematics II	Physical and Chemical Basics of Materials Science VL 2			
27	Programming in C		Linear Algebra II VL 2			Material Science Laboratory	
28	Programming in C VL 1		Linear Algebra II GÜ 1	Advanced Mechanical Engineering Design (part 1)		Companion Lecture for Materials Science Laboratory VL 2	
29	Programming in C PR 1		Linear Algebra II HÜ 1	Advanced Mechanical Engineering Design I VL 2		Laboratory PR 4	
30	Physics for Engineers (AIW)		Analysis II VL 2	Advanced Mechanical Engineering Design I HÜ 2			
31	Physics for Engineers VL 2		Analysis II GÜ 1				
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.

