

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

Sample course plan C Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))
Specialisation Mechanical Engineering, Focus Theoretical Mechanical Engineering

Legend:

Core qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
Core qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

LP	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7		
1	Chemistry	Electrical Engineering II: Alternating Current Networks and Basic Devices	Technical Thermodynamics II	Mechanical Engineering: Design (part 2)	Computer Engineering	Foundations of Management	Advanced Internship AIW/GES		
2	Chemistry I VL 2	Electrical Engineering II: Alternating Current Networks and Basic Devices VL 3 Electrical Engineering II: Alternating Current Networks and Basic Devices UE 2	Technical Thermodynamics II VL 2	Team Project Design PBL2 Methodology	Computer Engineering VL 3	Introduction to Management VL 3 Management Tutorial HÜ 2			
3	Chemistry II VL 2		Technical Thermodynamics II HÜ 1	Mechanical Design PBL3 Project II	Computer Engineering UE 1				
4	Chemistry I HÜ 1		Technical Thermodynamics II UE 1	Fundamentals of Materials Science (part 2) Fundamentals of Materials Science II VL 2	Advanced Mechanical Engineering Design (part 2) Introduction to Control Systems VL 2 Introduction to Control Systems UE 2				
5	Chemistry II HÜ 1		Mathematics III Analysis III VL 2 Analysis III UE 1 Analysis III HÜ 1 Differential Equations 1 VL 2 Differential Equations 1 UE 1 Differential Equations 1 HÜ 1					Fluid Dynamics Fluid Mechanics VL 3 Fluid Mechanics HÜ 2	
6			Mechanics III (Hydrostatics, Kinematics, Kinetics I) Mechanics III VL 3 Mechanics III UE 2 Mechanics III HÜ 1						Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems) Mechanics IV VL 3 Mechanics IV UE 2 Mechanics IV HÜ 1
7									
8	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	Fundamentals of Mechanical Engineering Design							
9	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields VL 3								
10	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields UE 2								
11	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields HÜ 2								
12									
13	Mathematics I	Technical Thermodynamics I			Measurement Technology for Mechanical and Process Engineers	Advanced Materials			
14	Linear Algebra I VL 2	Technical Thermodynamics I VL 2			Measurement Technology for Mechanical and Process Engineers VL 2	Advanced Materials Characterization VL 2			
15	Linear Algebra I UE 1	Technical Thermodynamics I HÜ 1			Measurement Technology for Mechanical and Process Engineers HÜ 1	Advanced Materials Design VL 2			
16	Linear Algebra I HÜ 1				Measurement Technology for Mechanical and Process Engineers UE 1	Advanced Materials Design HÜ 2			
17	Analysis I VL 2				Practical Course: Measurement and Control Systems PR 2				
18	Analysis I UE 1								
19	Analysis I HÜ 1								
20		Mechanics II: Mechanics of Materials			Advanced Mechanical Design Project	Production Engineering (part 2)	Bachelor Thesis		
21	Mechanics I (Statics)	Mechanics II VL 2	Mechanical Engineering:	Signals and Systems	Advanced Mechanical PBL4	Production VL 2			

	Mechanics I	VL 2	Mechanics II	UE 2	Design (part 1)	Signals and Systems	VL 3	Design Project	Engineering II			
	Mechanics I	UE 2	Mechanics II	HÜ 2	Embodiment Design and 3D-CAD	Signals and Systems	UE 2			Production Engineering II		HÜ 1
	Mechanics I	HÜ 1			Mechanical Design Project I							
22												
23												
24												
25												
26			Mathematics II		Fundamentals of Materials Science (part 1)			Production Engineering (part 1)				
27	Programming in C		Linear Algebra II	VL 2	Fundamentals of Materials Science I			Production Engineering I	VL 2			
	Programming in C	VL 1	Linear Algebra II	UE 1	Physical and Chemical Basics of Materials Science			Production Engineering I	HÜ 1			
	Programming in C	PR 1	Linear Algebra II	HÜ 1								
			Analysis II	VL 2								
28			Analysis II	HÜ 1								
29			Analysis II	UE 1	Advanced Mechanical Engineering Design (part 1)							
30	Physics for Engineers (AIW)				Advanced Mechanical Engineering Design I							
	Physics for Engineers	VL 2			Advanced Mechanical Engineering Design I							
	Physics for Engineers	UE 1										
31												
32												

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.