

Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w19)

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

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

23	Mechanics I Mechanics I Mechanics I	VL 2 UE 2 HÜ 1	Mechanics II	HÜ 2	Design (part 1) Embodiment Design and 3D-CAD Mechanical Design Project I	VL 2 PBL3	Signals and Systems Signals and Systems	VL 3 UE 2	I
24									
25									
26			Mathematics II		Fundamentals of Materials Science (part 1)				Structural Materials (part 1)
27	Programming in C Programming in C Programming in C	VL 1 PR 1	Linear Algebra II Linear Algebra II Linear Algebra II	VL 2 UE 1 HÜ 1	Fundamentals of Materials Science I Physical and Chemical Basics of Materials Science	VL 2 VL 2			Welding Technology
28			Analysis II	VL 2					
29			Analysis II	HÜ 1	Advanced Mechanical Engineering Design (part 1)				Material Science Laboratory
30	Physics for Engineers (AIW) Physics for Engineers Physics for Engineers	VL 2 UE 1	Analysis II	UE 1	Advanced Mechanical Engineering Design I Advanced Mechanical Engineering Design I	VL 2 HÜ 2			Companion Lecture for Materials Science Laboratory Material Science Laboratory
31									
32									
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.