

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 Product Development and Production

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	FormHrs/wk	Semester 2	FormHrs/wk	Semester 3	FormHrs/wk	Semester 4	FormHrs/wk	Semester 5	FormHrs/wk	Semester 6	FormHrs/wk	Semester 7	FormHrs/wk												
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	UE 1	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		Computer Engineering		Management Tutorial	
4															Chemistry I		Electrical Engineering II: Alternating Current Networks and Basic Devices		Technical Thermodynamics II							
5															Chemistry II		Electrical Engineering II: Alternating Current Networks and Basic Devices		Technical Thermodynamics II		Fundamentals of Materials Science (part 2)					
6																	Electrical Engineering II: Alternating Current Networks and Basic Devices		Technical Thermodynamics II		Fundamentals of Materials Science II	VL 2				
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	Integrated Product Development and Lightweight Design	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	Integrated Product Development I	VL 2	
9														Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Fundamentals of Mechanical Engineering Design		Analysis III	HÜ 1	Advanced Mechanical Engineering Design II		Introduction to Control Systems		Development of Lightweight Design Products	VL 2	
10														Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Fundamentals of Mechanical Engineering Design		Differential Equations 1	VL 2	Production Engineering (part 2)				CAE-Team Project	PBL2	
11														Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Fundamentals of Mechanical Engineering Design		Differential Equations 1	UE 1	Production Engineering II	VL 2					
12														Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Fundamentals of Mechanical Engineering Design		Differential Equations 1	HÜ 1	Production Engineering II	HÜ 1					
13	Mathematics I	VL 2	Technical Thermodynamics I	VL 2	Mechanics III (Hydrostatics, Kinematics, Kinetics I)	VL 3	Fluid Dynamics	VL 3	Measurement Technology for Mechanical and Process Engineers	VL 2	Enhanced Fundamentals of Materials Science	VL 2														
14														Linear Algebra I	Technical Thermodynamics I	HÜ 1	Mechanics III	VL 3	Fluid Mechanics	HÜ 2	Measurement Technology for Mechanical and Process Engineers		Enhanced Fundamentals: Metals			
15														Linear Algebra I	Technical Thermodynamics I	HÜ 1	Mechanics III	UE 2	Fluid Mechanics		Technology for Mechanical and Process Engineers		Enhanced Fundamentals: Ceramics and Polymers	VL 2		
16														Linear Algebra I	Technical Thermodynamics I	UE 1	Mechanics III	HÜ 1	Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)		Measurement Technology for Mechanical and Process Engineers	HÜ 1	Enhanced Fundamentals: Ceramics and Polymers	HÜ 1		
17														Linear Algebra I	Technical Thermodynamics I	HÜ 1	Mechanics III	HÜ 1	Mechanics IV	VL 3	Measurement Technology for Mechanical and Process Engineers					
18														Analysis I	Technical Thermodynamics I	UE 1	Mechanics III	HÜ 1	Mechanics IV	UE 2	Practical Course: Measurement and Control Systems	PR 2				
19	Analysis I	Technical Thermodynamics I	HÜ 1	Mechanics III	HÜ 1	Mechanics IV	HÜ 1																			
20			Mechanics II: Mechanics of					Advanced Mechanical		Advanced Materials		Bachelor Thesis														

21	Mechanics I (Statics) Mechanics I VL 2 Mechanics I UE 2 Mechanics I HÜ 1	Materials Mechanics II VL 2 Mechanics II UE 2 Mechanics II HÜ 2	Mechanical Engineering: Design (part 1) Embodiment Design and 3D-CAD VL 2 Mechanical Design Project I PBL3		Design Project Advanced Mechanical Design Project PBL4	Advanced Materials Characterization VL 2 Advanced Materials Design VL 2 Advanced Materials Design HÜ 2				
22								Mathematics II Linear Algebra II VL 2 Linear Algebra II UE 1 Linear Algebra II HÜ 1 Analysis II VL 2 Analysis II HÜ 1 Analysis II UE 1	Fundamentals of Materials Science (part 1) Fundamentals of Materials Science I VL 2 Physical and Chemical Basics of Materials Science VL 2	Production Technology Forming and Cutting Technology VL 2 Forming and Cutting Technology HÜ 1 Fundamentals of Machine Tools VL 2 Fundamentals of Machine Tools HÜ 1
23										
24	Production Engineering (part 1) Production Engineering I VL 2 Production Engineering I HÜ 1									
25			Physics for Engineers (AIW) Physics for Engineers VL 2 Physics for Engineers UE 1							
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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.