

Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w22)

Sample course plan B Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7)) Dual study program

Legend:

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

Specialisation Mechanical Engineering, Focus Product Development and Production								
1	Chemistry		Electrical Engineering II: Alternating Current Networks and Basic Devices	Technical Thermodynamics II	Signals and Systems	Introduction to Control Systems	Foundations of Management	Advanced Internship AIW/ ES
2	Chemistry I+II VL 4		Electrical Engineering II: Alternating Current Networks and Basic Devices VL 3	Technical Thermodynamics II VL 2	Signals and Systems VL 3	Introduction to Control Systems VL 2	Introduction to Management VL 3	
3	Chemistry I+II HÜ 2		Electrical Engineering II: Alternating Current Networks and Basic Devices GÜ 2	Technical Thermodynamics II HÜ 1	Signals and Systems GÜ 2	Introduction to Control Systems GÜ 2	Management Tutorial GÜ 2	
4				Technical Thermodynamics II GÜ 1				
5								
6								
7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Fundamentals of Mechanical Engineering Design	Mathematics III	Practical module 4 (dual study program, Bachelor's degree)	Practical module 5 (dual study program, Bachelor's degree)	Digital Product Development and Lightweight Design	
8	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields VL 3		Fundamentals of Mechanical Engineering Design VL 2	Analysis III VL 2	Practical term 4 0	Practical term 5 0	Digital Product Development VL 2	
9	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields GÜ 2		Fundamentals of Mechanical Engineering Design HÜ 2	Analysis III HÜ 1			Development of Lightweight Design Products VL 2	
10				Differential Equations 1 VL 2			CAE-Team Project PBL 2	
11				Differential Equations 1 GÜ 1				
12				Differential Equations 1 HÜ 1				
13	Mathematics I		Technical Thermodynamics I		Fluid Dynamics	Measurement Technology for Mechanical Engineers	Production Engineering	
14	Mathematics I VL 4		Technical Thermodynamics I VL 2		Fluid Mechanics VL 3	Measurement Technology for Mechanical Engineers VL 2	Production Engineering I VL 2	
15	Mathematics I HÜ 2		Technical Thermodynamics I HÜ 1		Fluid Mechanics HÜ 2	Measurement Technology for Mechanical Engineers PR 2	Production Engineering II VL 2	
16	Mathematics I GÜ 2		Technical Thermodynamics I GÜ 1			Measurement Technology for Mechanical Engineers HÜ 1	Production Engineering II HÜ 1	
17				Practical module 3 (dual study program, Bachelor's degree)		Measurement Technology for Mechanical Engineers PR 2	Production Engineering I HÜ 1	
18				Practical term 3 0		Practical Course: Measurement and Control Systems PR 2		
19			Mathematics II		Computational Mechanics	Advanced Mechanical Design Project	Fundamentals of Production and Quality Management	Bachelor thesis (dual study program)
20			Mathematics II VL 4		Computational Multibody Dynamics IV 2	Advanced Mechanical Design Project PBL 4	Production Process Organization VL 2	
21	Computer Science for Engineers - Introduction and Overview		Mathematics II HÜ 2	Engineering Mechanics III (Dynamics)	Computational Mechanics GÜ 2		Quality Management VL 2	
22	Computer Science for Engineers - Introduction and Overview VL 3		Mathematics II GÜ 2	Engineering Mechanics III VL 3	Computational Structural Mechanics IV 2			
23	Computer Science for Engineers - Introduction and Overview GÜ 2			Engineering Mechanics III GÜ 2				
24	Computer Science for Engineers - Introduction and Overview HÜ 1			Engineering Mechanics III HÜ 1				
25								
26					Advanced Mechanical Engineering Design (part 2)	Production Technology		
27	Practical module 1 (dual study program, Bachelor's degree)		Practical module 2 (dual study program, Bachelor's degree)	Advanced Mechanical Engineering Design (part 1)	Advanced Mechanical Engineering Design II VL 2	Forming and Cutting Technology VL 2		
28	Practical term 1 0		Practical term 2 0	Advanced Mechanical Engineering Design I VL 2	Advanced Mechanical Engineering Design II HÜ 2	Forming and Cutting Technology HÜ 1		
29				Advanced Mechanical Engineering Design I HÜ 2	Advanced Mechanical Engineering Design II PBL 2	Fundamentals of Machine Tools VL 2		
30				Advanced Mechanical Engineering Design I GÜ 2	Mechanical Engineering: Design (part 2)	Fundamentals of Machine Tools HÜ 1		
31					Team Project Design Methodology PBL 2			
32				Mechanical Engineering: Design (part 1)	Mechanical Design Project II PBL 3			
33	Engineering Mechanics I (Stereostatics)		Engineering Mechanics II (Elastostatics)	Embodiment Design and 3D-CAD Introduction and Practical Training VL 2		Materials Science Laboratory		
34	Engineering Mechanics I VL 2		Engineering Mechanics II VL 2	Mechanical Design Project I PBL 3		Companion Lecture for Materials Science Laboratory VL 2		
35	Engineering Mechanics I GÜ 2		Engineering Mechanics II GÜ 2			Material Science Laboratory PR 4		
36	Engineering Mechanics I HÜ 1		Engineering Mechanics II HÜ 2	Fundamentals of Materials Science				
37				Fundamentals of Materials Science II VL 2				
38				Fundamentals of Materials Science I VL 2				
				Physical and Chemical Basics of Materials Science VL 2				

Linking theory and practice (dual study program, Bachelor's degree) (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.

