

Course of Study Mechanical Engineering (Study Cohort w23)

Sample course plan C Bachelor Mechanical Engineering (MBBS) Dual study program

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

Specialisation Aircraft Systems Engineering

1	Mathematics I		Fundamentals of Mechanical Engineering Design	Advanced Mechanical Engineering Design (part 1)	Advanced Mechanical Engineering Design (part 2)	Advanced Mechanical Design Project	Foundations of Management
2	Mathematics I VL 4		Fundamentals of Mechanical Engineering Design VL 2	Advanced Mechanical Engineering Design I VL 2	Advanced Mechanical Engineering Design II VL 2	Advanced Mechanical Design Project PBL 4	Introduction to Management VL 3
3	Mathematics I HÜ 2		Fundamentals of Mechanical Engineering Design HÜ 2	Advanced Mechanical Engineering Design I HÜ 2	Advanced Mechanical Engineering Design II HÜ 2		Management Tutorial GÜ 2
4	Mathematics I GÜ 2						
5				Mechanical Engineering: Design (part 1)	Mechanical Engineering: Design (part 2)		
6				Embodiment Design and 3D-CAD Introduction VL 2	Team Project Design Methodology PBL 2		
7				and Practical Training	Mechanical Design Project II PBL 3		
8				Mechanical Design Project I PBL 3			
9	Fundamentals of Materials Science		Technical Thermodynamics I	Basics of Electrical Engineering	Fluid Dynamics	Introduction to Control Systems	Digital Product Development and Lightweight Design
10	Fundamentals of Materials Science II VL 2		Technical Thermodynamics I VL 2	Basics of Electrical Engineering VL 3	Fluid Mechanics VL 3	Introduction to Control Systems VL 2	Digital Product Development VL 2
11	Fundamentals of Materials Science I VL 2		Technical Thermodynamics I HÜ 1	Basics of Electrical Engineering GÜ 2	Fluid Mechanics HÜ 2	Introduction to Control Systems GÜ 2	Development of Lightweight Design Products VL 2
12	Physical and Chemical Basics of Materials Science VL 2		Technical Thermodynamics I GÜ 1				CAE-Team Project PBL 2
13							
14			Production Engineering	Technical Thermodynamics II	Practical module 4 (dual study program, Bachelor's degree)	Measurement Technology for Mechanical Engineers	Aeronautical Systems
15			Production Engineering I VL 2	Technical Thermodynamics II VL 2	Practical term 4 0	Measurement Technology for Mechanical VL 2	Air Transportation Systems VL 2
16	Team Project MB		Production Engineering II VL 2	Technical Thermodynamics II HÜ 1		Engineering	Fundamentals of Aircraft Systems VL 2
17	Team Project MB PBL 6		Production Engineering II HÜ 1	Technical Thermodynamics II GÜ 1		Measurement Technology for Mechanical PR 2	Fundamentals of Aircraft Systems GÜ 1
18			Production Engineering I HÜ 1			Engineering	Air Transportation Systems HÜ 1
19						Practical Course: Measurement and Control PR 2	
20						Systems	
21	Computer Science for Engineers - Introduction and Overview		Mathematics II	Mathematics III	Computational Mechanics	Practical module 5 (dual study program, Bachelor's degree)	Modeling, Simulation and Optimization (EN)
22	Computer Science for Engineers - Introduction VL 3		Mathematics II VL 4	Analysis III VL 2	Computational Multibody Dynamics IV 2	Practical term 5 0	Modeling, Simulation and Optimization IV 4
23	Computer Science for Engineers - Introduction and Overview GÜ 2		Mathematics II HÜ 2	Analysis III GÜ 1	Computational Mechanics GÜ 2		
24	Computer Science for Engineers - Introduction and Overview GÜ 2		Mathematics II GÜ 2	Analysis III HÜ 1	Computational Structural Mechanics IV 2		
25				Differential Equations 1 VL 2			
26				Differential Equations 1 GÜ 1			
27				Differential Equations 1 HÜ 1			
28	Practical module 1 (dual study program, Bachelor's degree)		Practical module 2 (dual study program, Bachelor's degree)	Practical module 3 (dual study program, Bachelor's degree)	Advanced Materials for Sustainability		Bachelor thesis (dual study program)
29	Practical term 1 0		Practical term 2 0	Practical term 3 0	Advanced Materials Characterization VL 2		
30					Advanced Materials for Sustainability VL 2		
31					Advanced Materials for Sustainability HÜ 2		
32							
33	Engineering Mechanics I (Stereostatics)		Engineering Mechanics II (Elastostatics)	Engineering Mechanics III (Dynamics)			
34	Engineering Mechanics I VL 2		Engineering Mechanics II VL 2	Engineering Mechanics III VL 3			
35	Engineering Mechanics I GÜ 2		Engineering Mechanics II GÜ 2	Engineering Mechanics III GÜ 2			
36	Engineering Mechanics I HÜ 1		Engineering Mechanics II HÜ 2	Engineering Mechanics III HÜ 1			
37							
38							
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.

