

Course of Study Mechanical Engineering (Study Cohort w23)

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

Specialisation Product Development and Production

	Core Qualification Compulsory		Specialisation Compulsory		Focus Compulsory		Thesis Compulsory	
	Core Qualification Elective Compulsory		Specialisation Elective Compulsory		Focus Elective Compulsory		Interdisciplinary complement	
1	Mathematics I		Fundamentals of Mechanical Engineering Design		Advanced Mechanical Engineering Design (part 1)		Advanced Mechanical Engineering Design (part 2)	
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
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	Introduction to Management VL 3
4	Mathematics I GÜ 2							Management Tutorial GÜ 2
5								
6								
7								
8			Technical Thermodynamics I		Basics of Electrical Engineering		Fluid Dynamics	Introduction to Control Systems
9	Fundamentals of Materials Science		Technical Thermodynamics I VL 2		Basics of Electrical Engineering VL 3		Fluid Dynamics VL 3	Introduction to Control Systems VL 2
10	Fundamentals of Materials Science II VL 2		Technical Thermodynamics I HÜ 1		Basics of Electrical Engineering GÜ 2		Fluid Dynamics HÜ 2	Introduction to Control Systems GÜ 2
11	Fundamentals of Materials Science I VL 2		Technical Thermodynamics I GÜ 1					Digital Product Development and Lightweight Design
12	Physical and Chemical Basics of Materials Science VL 2							Digital Product Development VL 2
13								Development of Lightweight Design Products VL 2
14			Production Engineering		Technical Thermodynamics II		Practical module 4 (dual study program, Bachelor's degree)	CAE-Team Project PBL 2
15	Team Project MB		Production Engineering I VL 2		Technical Thermodynamics II VL 2		Practical term 4 0	Measurement Technology for Mechanical Engineers
16	Team Project MB PBL 6		Production Engineering II VL 2		Technical Thermodynamics II HÜ 1		Measurement Technology for Mechanical Engineering VL 2	Bachelor thesis (dual study program)
17			Production Engineering II HÜ 1		Technical Thermodynamics II GÜ 1		Measurement Technology for Mechanical Engineering PR 2	
18			Production Engineering I HÜ 1				Measurement Technology for Mechanical Engineering PR 2	
19							Practical Course: Measurement and Control Systems PR 2	
20			Mathematics II		Mathematics III		Practical module 5 (dual study program, Bachelor's degree)	
21	Computer Science for Engineers - Introduction and Overview		Mathematics II VL 4		Analysis III VL 2		Practical term 5 0	
22	Computer Science for Engineers - Introduction and Overview VL 3		Mathematics II HÜ 2		Analysis III GÜ 1	Computational Mechanics		
23	Computer Science for Engineers - Introduction and Overview GÜ 2		Mathematics II GÜ 2		Analysis III HÜ 1	Computational Multibody Dynamics IV 2		
24					Differential Equations 1 VL 2	Computational Mechanics GÜ 2		
25					Differential Equations 1 GÜ 1	Computational Structural Mechanics IV 2		
26					Differential Equations 1 HÜ 1			
27	Practical module 1 (dual study program, Bachelor's degree)					Advanced Materials for Sustainability		Production Technology
28	Practical term 1 0		Practical module 2 (dual study program, Bachelor's degree)		Practical module 3 (dual study program, Bachelor's degree)	Advanced Materials Characterization VL 2		Forming and Cutting Technology VL 2
29			Practical term 2 0		Practical term 3 0	Advanced Materials for Sustainability VL 2		Forming and Cutting Technology HÜ 1
30						Advanced Materials for Sustainability HÜ 2		Fundamentals of Machine Tools VL 2
31								Fundamentals of Machine Tools HÜ 1
32								
33	Engineering Mechanics I (Stereostatics)		Engineering Mechanics II (Elastostatics)		Engineering Mechanics III (Dynamics)		Materials Science Laboratory	
34	Engineering Mechanics I VL 2		Engineering Mechanics II VL 2		Engineering Mechanics III VL 3		Companion Lecture for Materials Science VL 2	
35	Engineering Mechanics I GÜ 2		Engineering Mechanics II GÜ 2		Engineering Mechanics III GÜ 2		Laboratory	
36	Engineering Mechanics I HÜ 1		Engineering Mechanics II HÜ 2		Engineering Mechanics III HÜ 1		Material Science Laboratory PR 4	
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.

