

Course of Study Mechanical Engineering (Study Cohort w23)

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

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

