

Course of Study Mechanical Engineering (Study Cohort w20)

Sample course plan B Bachelor Mechanical Engineering (MBBS)

Specialisation Theoretical Mechanical Engineering

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

1	Production Engineering (part 1)	Production Engineering (part 2)	Advanced Mechanical Engineering Design (part 1)	Advanced Mechanical Engineering Design (part 2)	Advanced Mechanical Design Project	Foundations of Management
2	Production Engineering I VL 2	Production Engineering II 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	Production Engineering I HÜ 1	Production Engineering II HÜ 1	Advanced Mechanical Engineering Design I HÜ 2	Advanced Mechanical Engineering Design II HÜ 2		Management Tutorial GÜ 2
4	Computer Science for Mechanical Engineers	Fundamentals of Materials Science (part 2)	Mechanical Engineering: Design (part 1)	Mechanical Engineering: Design (part 2)		
5	Computer Science for Mechanical Engineers VL 3	Fundamentals of Materials Science II VL 2	Embodiment Design and 3D-CAD VL 2	Team Project Design Methodology PBL 2		
6	Computer Science for Mechanical Engineers GÜ 2		Mechanical Design Project I PBL 3	Mechanical Design Project II PBL 3		
7		Fundamentals of Mechanical Engineering Design				
8		Fundamentals of Mechanical Engineering Design VL 2				
9		Fundamentals of Mechanical Engineering Design HÜ 2				
10	Mathematics I		Basics of Electrical Engineering	Fluid Dynamics	Introduction to Control Systems	Modeling, Simulation and Optimization (EN)
11	Linear Algebra I VL 2		Basics of Electrical Engineering VL 3	Fluid Mechanics VL 3	Introduction to Control Systems VL 2	Modeling, Simulation and Optimization IV 4
12	Linear Algebra I GÜ 1		Basics of Electrical Engineering GÜ 2	Fluid Mechanics HÜ 2	Introduction to Control Systems GÜ 2	
13	Linear Algebra I HÜ 1					
14	Analysis I VL 2	Technical Thermodynamics I VL 2				
15	Analysis I GÜ 1	Technical Thermodynamics I HÜ 1	Technical Thermodynamics II	Mechanics IV (Oscillations, Analytical Mechanics, Multibody Systems, Numerical Mechanics)	Measurement Technology for Mechanical Engineers	Bachelor Thesis
16	Analysis I HÜ 1	Technical Thermodynamics I GÜ 1	Technical Thermodynamics II VL 2	Mechanics IV VL 3	Measurement Technology for Mechanical Engineering VL 2	
17			Technical Thermodynamics II HÜ 1	Mechanics IV GÜ 2	Measurement Technology for Mechanical Engineering HÜ 1	
18	Mechanics I (Statics)	Mechanics II: Mechanics of Materials	Technical Thermodynamics II GÜ 1	Mechanics IV HÜ 1	Practical Course: Measurement and Control Systems PR 2	
19	Mechanics I VL 2	Mechanics II VL 2				
20	Mechanics I GÜ 2	Mechanics II GÜ 2	Mathematics III	Fundamentals of Production and Quality Management	Numerical Mathematics I	
21	Mechanics I HÜ 1	Mechanics II HÜ 2	Analysis III VL 2	Production Process Organization VL 2	Numerical Mathematics I VL 2	
22			Analysis III GÜ 1	Quality Management VL 2	Numerical Mathematics I GÜ 2	
23			Analysis III HÜ 1			
24	Fundamentals of Materials Science (part 1)	Mathematics II	Differential Equations 1 VL 2			
25	Fundamentals of Materials Science I VL 2	Linear Algebra II VL 2	Differential Equations 1 GÜ 1			
26	Physical and Chemical Basics of Materials Science VL 2	Linear Algebra II GÜ 1	Differential Equations 1 HÜ 1			
27		Linear Algebra II HÜ 1			Heat Transfer	
28	Team Project MB	Analysis II VL 2	Mechanics III (Dynamics)		Heat Transfer VL 3	
29	Team Project MB PBL 6	Analysis II HÜ 1	Mechanics III VL 3		Heat Transfer HÜ 2	
30		Analysis II GÜ 1	Mechanics III GÜ 2			
31			Mechanics III HÜ 1			
32						
33						

Non-technical 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.

