

Course of Study Mechanical Engineering (Study Cohort w20)

Sample course plan B Bachelor Mechanical Engineering (MBBS)

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

Specialisation Mechatronics

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

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.

