

Course of Study Mechanical Engineering (Study Cohort w20)

Sample course plan A Bachelor Mechanical Engineering (MBBS)

Specialisation Product Development and Production

Legend	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	Integrated Product Development and Lightweight Design
11	Linear Algebra I VL 2		Basics of Electrical Engineering VL 3	Fluid Mechanics VL 3	Introduction to Control Systems VL 2	Integrated Product Development I VL 2
12	Linear Algebra I GÜ 1		Basics of Electrical Engineering GÜ 2	Fluid Mechanics HÜ 2	Introduction to Control Systems GÜ 2	Development of Lightweight Design Products VL 2
13	Linear Algebra I HÜ 1					CAE-Team Project PBL 2
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	Electrical Machines and Actuators	Production Technology	
21	Mechanics I HÜ 1	Mechanics II HÜ 2	Analysis III VL 2	Electrical Machines and Actuators VL 3	Forming and Cutting Technology VL 2	
22			Analysis III GÜ 1	Electrical Machines and Actuators HÜ 2	Forming and Cutting Technology HÜ 1	
23			Analysis III HÜ 1		Fundamentals of Machine Tools VL 2	
24	Fundamentals of Materials Science (part 1)	Mathematics II	Differential Equations 1 VL 2		Fundamentals of Machine Tools HÜ 1	
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		Material Science Laboratory	
27		Linear Algebra II HÜ 1			Companion Lecture for Materials Science Laboratory VL 2	
28	Team Project MB	Analysis II VL 2	Mechanics III (Dynamics)		Material Science Laboratory PR 4	
29	Team Project MB PBL 6	Analysis II HÜ 1	Mechanics III VL 3			
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.

