

# Course of Study Mechanical Engineering (Study Cohort w23)

Sample course plan C 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	<b>Mathematics I</b>		<b>Fundamentals of Mechanical Engineering Design</b>	<b>Advanced Mechanical Engineering Design (part 1)</b>	<b>Advanced Mechanical Engineering Design (part 2)</b>	<b>Advanced Mechanical Design Project</b>	<b>Foundations of Management</b>
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	Introduction to Management VL 3
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		Management Tutorial GÜ 2
4	Mathematics I GÜ 2						
5				<b>Mechanical Engineering: Design (part 1)</b>	<b>Mechanical Engineering: Design (part 2)</b>		
6				Embodiment Design and 3D-CAD Introduction and Practical Training VL 2	Team Project Design Methodology PBL 2		
7				Mechanical Design Project I PBL 3	Mechanical Design Project II PBL 3		
8			<b>Technical Thermodynamics I</b>	<b>Basics of Electrical Engineering</b>	<b>Fluid Dynamics</b>	<b>Introduction to Control Systems</b>	<b>Digital Product Development and Lightweight Design</b>
9	<b>Fundamentals of Materials Science</b>		Technical Thermodynamics I VL 2	Basics of Electrical Engineering VL 3	Fluid Mechanics VL 3	Introduction to Control Systems VL 2	Digital Product Development VL 2
10	Fundamentals of Materials Science II VL 2		Technical Thermodynamics I HÜ 1	Basics of Electrical Engineering GÜ 2	Fluid Mechanics HÜ 2	Introduction to Control Systems GÜ 2	Development of Lightweight Design Products VL 2
11	Fundamentals of Materials Science I VL 2		Technical Thermodynamics I GÜ 1				CAE-Team Project PBL 2
12	Physical and Chemical Basics of Materials Science VL 2						
13			<b>Production Engineering</b>	<b>Technical Thermodynamics II</b>	<b>Computational Mechanics</b>	<b>Measurement Technology for Mechanical Engineers</b>	<b>Bachelor Thesis</b>
14			Production Engineering I VL 2	Technical Thermodynamics II VL 2	Computational Multibody Dynamics IV 2	Measurement Technology for Mechanical Engineering VL 2	
15	<b>Team Project MB</b>		Production Engineering II VL 2	Technical Thermodynamics II HÜ 1	Computational Mechanics GÜ 2	Measurement Technology for Mechanical Engineering PR 2	
16	Team Project MB PBL 6		Production Engineering II HÜ 1	Technical Thermodynamics II GÜ 1	Computational Structural Mechanics IV 2	Measurement Technology for Mechanical Engineering PR 2	
17			Production Engineering I HÜ 1			Practical Course: Measurement and Control Systems PR 2	
18							
19			<b>Mathematics II</b>	<b>Mathematics III</b>	<b>Advanced Materials for Sustainability</b>	<b>Production Technology</b>	
20			Mathematics II VL 4	Analysis III VL 2	Advanced Materials Characterization VL 2	Forming and Cutting Technology VL 2	
21	<b>Computer Science for Engineers - Introduction and Overview</b>		Mathematics II HÜ 2	Analysis III GÜ 1	Advanced Materials for Sustainability VL 2	Forming and Cutting Technology HÜ 1	
22	Computer Science for Engineers - Introduction and Overview VL 3		Mathematics II GÜ 2	Analysis III HÜ 1	Advanced Materials for Sustainability HÜ 2	Fundamentals of Machine Tools VL 2	
23				Differential Equations 1 VL 2		Fundamentals of Machine Tools HÜ 1	
24	Computer Science for Engineers - Introduction and Overview GÜ 2			Differential Equations 1 GÜ 1			
25				Differential Equations 1 HÜ 1			
26						<b>Materials Science Laboratory</b>	
27	<b>Engineering Mechanics I (Stereostatics)</b>		<b>Engineering Mechanics II (Elastostatics)</b>	<b>Engineering Mechanics III (Dynamics)</b>		Companion Lecture for Materials Science Laboratory VL 2	
28	Engineering Mechanics I VL 2		Engineering Mechanics II VL 2	Engineering Mechanics III VL 3		Material Science Laboratory PR 4	
29	Engineering Mechanics I GÜ 2		Engineering Mechanics II GÜ 2	Engineering Mechanics III GÜ 2			
30	Engineering Mechanics I HÜ 1		Engineering Mechanics II HÜ 2	Engineering Mechanics III HÜ 1			
31							
32							

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.

