

# Course of Study Mechanical Engineering (Study Cohort w20)

Sample course plan B Bachelor Mechanical Engineering (MBBS)

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

Specialisation Biomechanics											
1	<b>Production Engineering (part 1)</b>		<b>Production Engineering (part 2)</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	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	<b>Computer Science for Mechanical Engineers</b>		<b>Fundamentals of Materials Science (part 2)</b>		<b>Mechanical Engineering: Design (part 1)</b>		<b>Mechanical Engineering: Design (part 2)</b>				
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			<b>Fundamentals of Mechanical Engineering Design</b>								
8			Fundamentals of Mechanical Engineering Design VL 2								
9			Fundamentals of Mechanical Engineering Design HÜ 2								
10	<b>Mathematics I</b>				<b>Basics of Electrical Engineering</b>		<b>Fluid Dynamics</b>		<b>Introduction to Control Systems</b>		<b>MED II: Introduction to Physiology</b>
11	Linear Algebra I VL 2				Basics of Electrical Engineering VL 3		Fluid Mechanics VL 3		Introduction to Control Systems VL 2		Introduction to Physiology VL 2
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										<b>BIO I: Experimental Methods in Biomechanics</b>
14	Analysis I VL 2		<b>Technical Thermodynamics I</b>								Experimental Methods in Biomechanics VL 2
15	Analysis I GÜ 1		Technical Thermodynamics I HÜ 1								
16	Analysis I HÜ 1		Technical Thermodynamics I GÜ 1		<b>Technical Thermodynamics II</b>		<b>Mechanics IV (Oscillations, Analytical Mechanics, Multibody Systems, Numerical Mechanics)</b>		<b>Measurement Technology for Mechanical Engineers</b>		<b>Bachelor Thesis</b>
17					Technical Thermodynamics II VL 2		Mechanics IV VL 3		Measurement Technology for Mechanical Engineering VL 2		
18	<b>Mechanics I (Statics)</b>		<b>Mechanics II: Mechanics of Materials</b>		Technical Thermodynamics II HÜ 1		Mechanics IV GÜ 2		Measurement Technology for Mechanical Engineering HÜ 1		
19	Mechanics I VL 2		Mechanics II VL 2		Technical Thermodynamics II GÜ 1		Mechanics IV HÜ 1		Practical Course: Measurement and Control Systems PR 2		
20	Mechanics I GÜ 2		Mechanics II GÜ 2								
21	Mechanics I HÜ 1		Mechanics II HÜ 2								
22					<b>Mathematics III</b>		<b>MED I: Introduction to Anatomy</b>		<b>MED II: Introduction to Biochemistry and Molecular Biology</b>		
23					Analysis III VL 2		Introduction to Anatomy VL 2		Introduction to Biochemistry and Molecular Biology VL 2		
24					Analysis III GÜ 1				<b>BIO I: Implants and Fracture Healing</b>		
25	<b>Fundamentals of Materials Science (part 1)</b>		<b>Mathematics II</b>		Analysis III HÜ 1		<b>MED I: Introduction to Radiology and Radiation Therapy</b>		Implants and Fracture Healing VL 2		
26	Fundamentals of Materials Science I VL 2		Linear Algebra II VL 2		Differential Equations 1 VL 2						
27	Physical and Chemical Basics of Materials Science VL 2		Linear Algebra II GÜ 1		Differential Equations 1 GÜ 1		<b>Fundamentals of Production and Quality Management</b>				
28			Linear Algebra II HÜ 1		Differential Equations 1 HÜ 1		Production Process Organization VL 2				
29	<b>Team Project MB</b>		Analysis II VL 2				Quality Management VL 2				
30	Team Project MB PBL 6		Analysis II HÜ 1		<b>Mechanics III (Dynamics)</b>						
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.

