

# Course of Study Mechanical Engineering (Study Cohort w21)

Sample course plan B Bachelor Mechanical Engineering (MBBS)

Specialisation: Energy Systems		Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Form Hrs/wk	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk	Form Hrs/wk
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>Mathematics I</b>	<b>Fundamentals of Materials Science (part 2)</b>	<b>Mechanical Engineering: Design (part 1)</b>	<b>Mechanical Engineering: Design (part 2)</b>		
5	Linear Algebra I VL 2	Fundamentals of Materials Science II VL 2	Embodiment Design and 3D-CAD VL 2	Team Project Design Methodology PBL 2		
6	Linear Algebra I GÜ 1		Mechanical Design Project I PBL 3	Mechanical Design Project II PBL 3		
7	Linear Algebra I HÜ 1	<b>Fundamentals of Mechanical Engineering Design</b>				
8	Analysis I VL 2	Fundamentals of Mechanical Engineering Design VL 2	<b>Basics of Electrical Engineering</b>	<b>Fluid Dynamics</b>	<b>Introduction to Control Systems</b>	<b>Reciprocating Machinery (part 2)</b>
9	Analysis I GÜ 1	Fundamentals of Mechanical Engineering Design HÜ 2	Basics of Electrical Engineering VL 3	Fluid Mechanics VL 3	Introduction to Control Systems VL 2	Internal Combustion Engines I VL 2
10	Analysis I HÜ 1		Basics of Electrical Engineering GÜ 2	Fluid Mechanics HÜ 2	Introduction to Control Systems GÜ 2	Internal Combustion Engines I HÜ 1
11						
12	<b>Mechanics I (Statics)</b>	<b>Technical Thermodynamics I</b>	<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>
13	Mechanics I VL 2	Technical Thermodynamics I VL 2	Technical Thermodynamics II VL 2	Mechanics IV VL 3	Measurement Technology for Mechanical Engineering VL 2	
14	Mechanics I GÜ 2	Technical Thermodynamics I HÜ 1	Technical Thermodynamics II HÜ 1	Mechanics IV GÜ 2	Measurement Technology for Mechanical Engineering HÜ 1	
15	Mechanics I HÜ 1	Technical Thermodynamics I GÜ 1	Technical Thermodynamics II GÜ 1	Mechanics IV HÜ 1	Measurement Technology for Mechanical Engineering HÜ 1	
16					Practical Course: Measurement and Control Systems PR 2	
17						
18	<b>Fundamentals of Materials Science (part 1)</b>	<b>Mechanics II: Mechanics of Materials</b>	<b>Mathematics III</b>	<b>Fundamentals of Production and Quality Management</b>	<b>Heat Transfer</b>	
19	Fundamentals of Materials Science I VL 2	Mechanics II VL 2	Analysis III VL 2	Production Process Organization VL 2	Heat Transfer VL 3	
20	Physical and Chemical Basics of Materials Science VL 2	Mechanics II GÜ 2	Analysis III GÜ 1	Quality Management VL 2	Heat Transfer HÜ 2	
21		Mechanics II HÜ 2	Analysis III HÜ 1			
22	<b>Team Project MB</b>		Differential Equations 1 VL 2			
23	Team Project MB PBL 6		Differential Equations 1 GÜ 1			
24		<b>Mathematics II</b>	Differential Equations 1 HÜ 1			
25		Linear Algebra II VL 2			<b>Reciprocating Machinery (part 1)</b>	
26		Linear Algebra II GÜ 1			Fundamentals of Reciprocating Engines and Turbomachinery - Part Reciprocating Engines VL 1	
27		Linear Algebra II HÜ 1			Fundamentals of Reciprocating Engines and Turbomachinery - Part Reciprocating Engines HÜ 1	
28	<b>Computer Science for Engineers - Introduction and Overview</b>		<b>Mechanics III (Dynamics)</b>		<b>Gas and Steam Power Plants</b>	
29	Computer Science for Engineers - Introduction and Overview VL 3		Mechanics III VL 3		Gas and Steam Power Plants VL 3	
30	Computer Science for Engineers - Introduction and Overview GÜ 2		Mechanics III GÜ 2		Gas and Steam Power Plants HÜ 1	
31	Computer Science for Engineers - Introduction and Overview HÜ 1		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.

