

# Course of Study Mechanical Engineering (Study Cohort w20)

Sample course plan B Bachelor Mechanical Engineering (MBBS)

Specialisation Materials in Engineering Sciences

	Core Qualification Compulsory		Specialisation Compulsory		Focus Compulsory		Thesis Compulsory	
	Core Qualification Elective Compulsory		Specialisation Elective Compulsory		Focus Elective Compulsory		Interdisciplinary complement	
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>	
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
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
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>		<b>Basics of Electrical Engineering</b>		<b>Fluid Dynamics</b>	
8			Fundamentals of Mechanical Engineering Design	VL 2	Basics of Electrical Engineering	VL 3	Fluid Mechanics	VL 3
9			Fundamentals of Mechanical Engineering Design	HÜ 2	Basics of Electrical Engineering	GÜ 2	Fluid Mechanics	HÜ 2
10	<b>Mathematics I</b>		<b>Technical Thermodynamics I</b>		<b>Technical Thermodynamics II</b>		<b>Mechanics IV (Oscillations, Analytical Mechanics, Multibody Systems, Numerical Mechanics)</b>	
11	Linear Algebra I	VL 2	Technical Thermodynamics I	VL 2	Technical Thermodynamics II	VL 2	Mechanics IV	VL 3
12	Linear Algebra I	GÜ 1	Technical Thermodynamics I	HÜ 1	Technical Thermodynamics II	HÜ 1	Mechanics IV	GÜ 2
13	Linear Algebra I	HÜ 1	Technical Thermodynamics I	GÜ 1	Technical Thermodynamics II	GÜ 1	Mechanics IV	HÜ 1
14	Analysis I	VL 2						
15	Analysis I	GÜ 1						
16	Analysis I	HÜ 1						
17								
18	<b>Mechanics I (Statics)</b>		<b>Mechanics II: Mechanics of Materials</b>		<b>Mathematics III</b>		<b>Fundamentals of Production and Quality Management</b>	
19	Mechanics I	VL 2	Mechanics II	VL 2	Analysis III	VL 2	Production Process Organization	VL 2
20	Mechanics I	GÜ 2	Mechanics II	GÜ 2	Analysis III	GÜ 1	Quality Management	VL 2
21	Mechanics I	HÜ 1	Mechanics II	HÜ 2	Analysis III	HÜ 1		
22					Differential Equations 1	VL 2		
23					Differential Equations 1	GÜ 1		
24					Differential Equations 1	HÜ 1		
25	<b>Fundamentals of Materials Science (part 1)</b>		<b>Mathematics II</b>		<b>Mechanics III (Dynamics)</b>		<b>Material Science Laboratory</b>	
26	Fundamentals of Materials Science I	VL 2	Linear Algebra II	VL 2	Mechanics III	VL 3	Companion Lecture for Materials Science Laboratory	VL 2
27	Physical and Chemical Basics of Materials Science	VL 2	Linear Algebra II	GÜ 1	Mechanics III	GÜ 2	Material Science Laboratory	PR 4
28			Linear Algebra II	HÜ 1	Mechanics III	HÜ 1		
29			Analysis II	VL 2				
30			Analysis II	HÜ 1				
31			Analysis II	GÜ 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.

