

# Course of Study Mechanical Engineering (Study Cohort w21)

Sample course plan C Bachelor Mechanical Engineering (MBBS)

Specialisation: Mechatronics		Form Hrs/wk	Semester 2	Form Hrs/wk	Semester 3	Form Hrs/wk	Semester 4	Form Hrs/wk	Semester 5	Form Hrs/wk	Semester 6	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								
9	Analysis I	GÜ 1	Fundamentals of Mechanical Engineering Design	HÜ 2	<b>Basics of Electrical Engineering</b>		<b>Fluid Dynamics</b>		<b>Introduction to Control Systems</b>		<b>Semiconductor Circuit Design</b>	
10	Analysis I	HÜ 1			Basics of Electrical Engineering	VL 3	Fluid Mechanics	VL 3	Introduction to Control Systems	VL 2	Semiconductor Circuit Design	VL 3
11					Basics of Electrical Engineering	GÜ 2	Fluid Mechanics	HÜ 2	Introduction to Control Systems	GÜ 2	Semiconductor Circuit Design	GÜ 1
12	<b>Mechanics I (Statics)</b>		<b>Technical Thermodynamics I</b>									
13	Mechanics I	VL 2	Technical Thermodynamics I	VL 2	<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>	
14	Mechanics I	GÜ 2	Technical Thermodynamics I	HÜ 1	Technical Thermodynamics II	VL 2	Mechanics IV	VL 3	Measurement Technology for Mechanical Engineering	VL 2		
15	Mechanics I	HÜ 1	Technical Thermodynamics I	GÜ 1	Technical Thermodynamics II	HÜ 1	Mechanics IV	GÜ 2	Measurement Technology for Mechanical Engineering	HÜ 1		
16					Technical Thermodynamics II	GÜ 1	Mechanics IV	HÜ 1	Measurement Technology for Mechanical Engineering	PR 2		
17									Practical Course: Measurement and Control Systems			
18	<b>Fundamentals of Materials Science (part 1)</b>		<b>Mechanics II: Mechanics of Materials</b>		<b>Mathematics III</b>		<b>Mathematics IV</b>		<b>Simulation and Design of Mechatronic Systems</b>			
19	Fundamentals of Materials Science I	VL 2	Mechanics II	VL 2	Analysis III	VL 2	Complex Functions	VL 2	Simulation and Design of Mechatronic Systems	VL 2		
20	Physical and Chemical Basics of Materials Science	VL 2	Mechanics II	GÜ 2	Analysis III	GÜ 1	Complex Functions	GÜ 1	Simulation and Design of Mechatronic Systems	HÜ 1		
21			Mechanics II	HÜ 2	Analysis III	HÜ 1	Complex Functions	HÜ 1	Simulation and Design of Mechatronic Systems	PR 1		
22	<b>Team Project MB</b>				Differential Equations 1	VL 2	Differential Equations 2	VL 2				
23	Team Project MB	PBL 6			Differential Equations 1	GÜ 1	Differential Equations 2	GÜ 1				
24			<b>Mathematics II</b>		Differential Equations 1	HÜ 1	Differential Equations 2	HÜ 1				
25			Linear Algebra II	VL 2								
26			Linear Algebra II	GÜ 1								
27			Linear Algebra II	HÜ 1	<b>Mechanics III (Dynamics)</b>		<b>Advanced Materials</b>					
28	<b>Computer Science for Engineers - Introduction and Overview</b>		Analysis II	VL 2	Mechanics III	VL 3	Advanced Materials Characterization	VL 2				
29	Computer Science for Engineers - Introduction and Overview	VL 3	Analysis II	HÜ 1	Mechanics III	GÜ 2	Advanced Materials Design	VL 2				
30	Computer Science for Engineers - Introduction and Overview	GÜ 2	Analysis II	HÜ 1	Mechanics III	HÜ 1	Advanced Materials Design	HÜ 2				
31												
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.

