

# Course of Study Mechanical Engineering (Study Cohort w21)

## Sample course plan A Bachelor Mechanical Engineering (MBBS)

### Specialisation: Aircraft Systems Engineering

		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	
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>	
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>		<b>Basics of Electrical Engineering</b>		<b>Fluid Dynamics</b>		<b>Introduction to Control Systems</b>		<b>Integrated Product Development and Lightweight Design</b>	
8	Analysis I VL 2	Fundamentals of Mechanical Engineering Design VL 2		Basics of Electrical Engineering VL 3		Fluid Mechanics VL 3		Introduction to Control Systems VL 2		Integrated Product Development I VL 2	
9	Analysis I GÜ 1	Fundamentals of Mechanical Engineering Design HÜ 2		Basics of Electrical Engineering GÜ 2		Fluid Mechanics HÜ 2		Introduction to Control Systems GÜ 2		Development of Lightweight Design Products VL 2	
10	Analysis I HÜ 1									CAE-Team Project PBL 2	
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>Aeronautical Systems</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		Air Transportation Systems 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		Fundamentals of Aircraft Systems GÜ 1	
15	Mechanics I HÜ 1	Technical Thermodynamics I GÜ 1		Technical Thermodynamics II GÜ 1		Mechanics IV HÜ 1		Practical Course: Measurement and Control Systems PR 2		Air Transportation Systems HÜ 1	
16											
17											
18	<b>Fundamentals of Materials Science (part 1)</b>	<b>Mechanics II: Mechanics of Materials</b>		<b>Mathematics III</b>		<b>Electrical Machines and Actuators</b>		<b>Simulation and Design of Mechatronic Systems</b>		<b>Bachelor Thesis</b>	
19	Fundamentals of Materials Science I VL 2	Mechanics II VL 2		Analysis III VL 2		Electrical Machines and Actuators VL 3		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		Electrical Machines and Actuators HÜ 2		Simulation and Design of Mechatronic Systems HÜ 1			
21		Mechanics II HÜ 2		Analysis III HÜ 1				Simulation and Design of Mechatronic Systems PR 1			
22	<b>Team Project MB</b>			Differential Equations 1 VL 2							
23	Team Project MB PBL 6			Differential Equations 1 GÜ 1							
24				Differential Equations 1 HÜ 1							
25		<b>Mathematics II</b>									
26		Linear Algebra II VL 2									
27		Linear Algebra II GÜ 1									
28		Linear Algebra II HÜ 1									
29	<b>Computer Science for Engineers - Introduction and Overview</b>	Analysis II VL 2		<b>Mechanics III (Dynamics)</b>		Mechanics III VL 3					
30	Computer Science for Engineers - Introduction and Overview VL 3	Analysis II HÜ 1		Mechanics III GÜ 2		Mechanics III HÜ 1					
31	Computer Science for Engineers - Introduction and Overview GÜ 2	Analysis II GÜ 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.

