

Course of Study Mechanical Engineering (Study Cohort w20)

Sample course plan A Bachelor Mechanical Engineering (MBBS)

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

Specialisation Aircraft Systems Engineering

1	Production Engineering (part 1)	Production Engineering (part 2)	Advanced Mechanical Engineering Design (part 1)	Advanced Mechanical Engineering Design (part 2)	Advanced Mechanical Design Project	Foundations of Management
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	Computer Science for Mechanical Engineers	Fundamentals of Materials Science (part 2)	Mechanical Engineering: Design (part 1)	Mechanical Engineering: Design (part 2)		
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		Fundamentals of Mechanical Engineering Design				
8		Fundamentals of Mechanical Engineering Design VL 2				
9		Fundamentals of Mechanical Engineering Design HÜ 2				
10	Mathematics I		Basics of Electrical Engineering	Fluid Dynamics	Introduction to Control Systems	Integrated Product Development and Lightweight Design
11	Linear Algebra I VL 2		Basics of Electrical Engineering VL 3	Fluid Mechanics VL 3	Introduction to Control Systems VL 2	Integrated Product Development I VL 2
12	Linear Algebra I GÜ 1		Basics of Electrical Engineering GÜ 2	Fluid Mechanics HÜ 2	Introduction to Control Systems GÜ 2	Development of Lightweight Design Products VL 2
13	Linear Algebra I HÜ 1					CAE-Team Project PBL 2
14	Analysis I VL 2	Technical Thermodynamics I VL 2				
15	Analysis I GÜ 1	Technical Thermodynamics I HÜ 1	Technical Thermodynamics II	Mechanics IV (Oscillations, Analytical Mechanics, Multibody Systems, Numerical Mechanics)	Measurement Technology for Mechanical Engineers	Aeronautical Systems
16	Analysis I HÜ 1	Technical Thermodynamics I GÜ 1	Technical Thermodynamics II VL 2	Mechanics IV VL 3	Measurement Technology for Mechanical Engineering VL 2	Air Transportation Systems VL 2
17			Technical Thermodynamics II HÜ 1	Mechanics IV GÜ 2	Measurement Technology for Mechanical Engineering HÜ 1	Fundamentals of Aircraft Systems GÜ 1
18	Mechanics I (Statics)	Mechanics II: Mechanics of Materials	Technical Thermodynamics II GÜ 1	Mechanics IV HÜ 1	Practical Course: Measurement and Control Systems PR 2	Air Transportation Systems HÜ 1
19	Mechanics I VL 2	Mechanics II VL 2				
20	Mechanics I GÜ 2	Mechanics II GÜ 2	Mathematics III	Electrical Machines and Actuators	Simulation and Design of Mechatronic Systems	Bachelor Thesis
21	Mechanics I HÜ 1	Mechanics II HÜ 2	Analysis III VL 2	Electrical Machines and Actuators VL 3	Simulation and Design of Mechatronic Systems VL 2	
22			Analysis III GÜ 1	Electrical Machines and Actuators HÜ 2	Simulation and Design of Mechatronic Systems HÜ 1	
23			Analysis III HÜ 1		Simulation and Design of Mechatronic Systems PR 1	
24	Fundamentals of Materials Science (part 1)	Mathematics II	Differential Equations 1 VL 2			
25	Fundamentals of Materials Science I VL 2	Linear Algebra II VL 2	Differential Equations 1 GÜ 1			
26	Physical and Chemical Basics of Materials Science VL 2	Linear Algebra II GÜ 1	Differential Equations 1 HÜ 1			
27		Linear Algebra II HÜ 1				
28	Team Project MB	Analysis II VL 2	Mechanics III (Dynamics)			
29	Team Project MB PBL 6	Analysis II HÜ 1	Mechanics III VL 3			
30		Analysis II GÜ 1	Mechanics III GÜ 2			
31			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.

