

Course of Study Mechanical Engineering (Study Cohort w21)

Sample course plan A Bachelor Mechanical Engineering (MBBS)

Specialisation: Materials in Engineering Sciences

		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	Production Engineering (part 1)			Production Engineering (part 2)		Advanced Mechanical Engineering Design (part 1)		Advanced Mechanical Engineering Design (part 2)		Advanced Mechanical Design Project	
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	Mathematics I	Fundamentals of Materials Science (part 2)		Mechanical Engineering: Design (part 1)		Mechanical Engineering: Design (part 2)					
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	Fundamentals of Mechanical Engineering Design									
8	Analysis I VL 2	Fundamentals of Mechanical Engineering Design VL 2									
9	Analysis I GÜ 1	Fundamentals of Mechanical Engineering Design HÜ 2									
10	Analysis I HÜ 1										
11											
12	Mechanics I (Statics)	Technical Thermodynamics I									
13	Mechanics I VL 2	Technical Thermodynamics I VL 2									
14	Mechanics I GÜ 2	Technical Thermodynamics I HÜ 1		Technical Thermodynamics II		Mechanics IV (Oscillations, Analytical Mechanics, Multibody Systems, Numerical Mechanics)		Measurement Technology for Mechanical Engineers		Enhanced Fundamentals of Materials Science	
15	Mechanics I HÜ 1	Technical Thermodynamics I GÜ 1		Technical Thermodynamics II VL 2		Mechanics IV VL 3		Measurement Technology for Mechanical Engineering VL 2		Enhanced Fundamentals: Metals VL 2	
16				Technical Thermodynamics II HÜ 1		Mechanics IV GÜ 2		Measurement Technology for Mechanical Engineering HÜ 1		Enhanced Fundamentals: Ceramics and Polymers VL 2	
17				Technical Thermodynamics II GÜ 1		Mechanics IV HÜ 1		Practical Course: Measurement and Control Systems PR 2		Enhanced Fundamentals: Ceramics and Polymers HÜ 1	
18	Fundamentals of Materials Science (part 1)	Mechanics II: Mechanics of Materials									
19	Fundamentals of Materials Science I VL 2	Mechanics II VL 2									
20	Physical and Chemical Basics of Materials Science VL 2	Mechanics II GÜ 2		Mathematics III		Electrical Machines and Actuators		Material Science Laboratory		Bachelor Thesis	
21		Mechanics II HÜ 2		Analysis III VL 2		Electrical Machines and Actuators VL 3		Companion Lecture for Materials Science Laboratory VL 2			
22	Team Project MB			Analysis III GÜ 1		Electrical Machines and Actuators HÜ 2		Material Science Laboratory PR 4			
23	Team Project MB PBL 6			Differential Equations 1 VL 2							
24				Differential Equations 1 GÜ 1							
25		Mathematics II		Differential Equations 1 HÜ 1				Materials Engineering: Materials Selection, Processing and Modelling			
26		Linear Algebra II VL 2						Materials Selection and Processing VL 3			
27		Linear Algebra II GÜ 1		Mechanics III (Dynamics)				Materials and Process Modeling VL 3			
28		Linear Algebra II HÜ 1		Mechanics III VL 3							
29	Computer Science for Engineers - Introduction and Overview	Analysis II VL 2		Mechanics III GÜ 2							
30	Computer Science for Engineers - Introduction and Overview VL 3	Analysis II HÜ 1		Mechanics III HÜ 1							
31	Computer Science for Engineers - Introduction and Overview GÜ 2	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.

