

Course of Study Mechanical Engineering (Study Cohort w20)

Sample course plan C 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	Production Engineering (part 1)		Production Engineering (part 2)		Advanced Mechanical Engineering Design (part 1)		Advanced Mechanical Engineering Design (part 2)	
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	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		Basics of Electrical Engineering		Fluid Dynamics	
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	Mathematics I		Technical Thermodynamics I		Technical Thermodynamics II		Mechanics IV (Oscillations, Analytical Mechanics, Multibody Systems, Numerical Mechanics)	
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	Mechanics I (Statics)		Mechanics II: Mechanics of Materials		Mathematics III		Advanced Materials	
19	Mechanics I	VL 2	Mechanics II	VL 2	Analysis III	VL 2	Advanced Materials Characterization	VL 2
20	Mechanics I	GÜ 2	Mechanics II	GÜ 2	Analysis III	GÜ 1	Advanced Materials Design	VL 2
21	Mechanics I	HÜ 1	Mechanics II	HÜ 2	Analysis III	HÜ 1	Advanced Materials Design	HÜ 2
22					Differential Equations 1	VL 2		
23					Differential Equations 1	GÜ 1		
24					Differential Equations 1	HÜ 1		
24	Fundamentals of Materials Science (part 1)		Mathematics II		Mechanics III (Dynamics)			
25	Fundamentals of Materials Science I	VL 2	Linear Algebra II	VL 2	Mechanics III	VL 3		
26	Physical and Chemical Basics of Materials Science	VL 2	Linear Algebra II	GÜ 1	Mechanics III	GÜ 2		
27			Linear Algebra II	HÜ 1	Mechanics III	HÜ 1		
28			Analysis II	VL 2				
29			Analysis II	HÜ 1				
30			Analysis II	GÜ 1				
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.

