

Course of Study Mechanical Engineering (Study Cohort w21)

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

