

Course of Study Mechanical Engineering (Study Cohort w17)

Sample course plan A Bachelor Mechanical Engineering (MBBS)

Specialisation: Materials in Engineering Sciences

Semester	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	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 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 2	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	Computer Science for Mechanical Engineers HÜ 1	Fundamentals of Mechanical Engineering Design		Basics of Electrical Engineering		Fluid Dynamics		Introduction to Control Systems		Structural Materials (part 2)		
8		Fundamentals of Mechanical Engineering Design VL 2	Fundamentals of Mechanical Engineering Design HÜ 2	Basics of Electrical Engineering VL 3	Fluid Mechanics VL 3	Introduction to Control Systems VL 2	Fundamentals of Mechanical Properties of Materials VL 2					
9				Basics of Electrical Engineering GÜ 2	Fluid Mechanics HÜ 2	Introduction to Control Systems GÜ 2						
10	Mathematics I										Enhanced Fundamentals of Materials Science	
11	Linear Algebra I VL 2											Enhanced Fundamentals: Metals VL 2
12	Linear Algebra I GÜ 1											Enhanced Fundamentals: Ceramics and Polymers VL 2
13	Linear Algebra I HÜ 1											Enhanced Fundamentals: Ceramics and Polymers HÜ 1
14	Analysis I VL 2	Technical Thermodynamics I VL 2			Technical Thermodynamics II		Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)		Measurement Technology for Mechanical and Process Engineers			
15	Analysis I GÜ 1	Technical Thermodynamics I HÜ 1			Technical Thermodynamics II VL 2	Mechanics IV VL 3	Measurement Technology for Mechanical and Process Engineers VL 2					
16	Analysis I HÜ 1	Technical Thermodynamics I GÜ 1			Technical Thermodynamics II HÜ 1	Mechanics IV GÜ 2	Measurement Technology for Mechanical and Process Engineers HÜ 1					
17					Technical Thermodynamics II GÜ 1	Mechanics IV HÜ 1	Practical Course: Measurement and Control Systems PR 2					
18	Mechanics I (Statics)		Mechanics II: Mechanics of Materials								Bachelor Thesis	
19	Mechanics I VL 2	Mechanics II VL 2			Mathematics III		Electrical Machines		Structural Materials (part 1)			
20	Mechanics I GÜ 2	Mechanics II GÜ 2			Analysis III VL 2	Electrical Machines VL 3	Welding Technology VL 3					
21	Mechanics I HÜ 1	Mechanics II HÜ 2			Analysis III GÜ 1	Electrical Machines HÜ 2						
22					Analysis III HÜ 1							
23					Differential Equations 1 VL 2							
24	Fundamentals of Materials Science (part 1)		Mathematics II		Differential Equations 1 GÜ 1							
25	Fundamentals of Materials Science I VL 2	Linear Algebra II VL 2			Differential Equations 1 HÜ 1							
26	Physical and Chemical Basics of Materials Science VL 2	Linear Algebra II GÜ 1										
27		Linear Algebra II HÜ 1			Mechanics III (Hydrostatics, Kinematics, Kinetics I)				Material Science Laboratory			
28		Analysis II VL 2			Mechanics III VL 3				Companion Lecture for Materials Science Laboratory VL 2			
29		Analysis II HÜ 1			Mechanics III GÜ 2				Material Science Laboratory PR 4			
30		Analysis II GÜ 1			Mechanics III HÜ 1							
31												
32												
33												

Nontechnical Complementary 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.

