

Course of Study Mechanical Engineering (Study Cohort w17)

Sample course plan B Bachelor Mechanical Engineering (MBBS)

Specialisation: Product Development and Production

		Semester 3		Semester 4		Semester 5		Semester 6	
		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	
8		Fundamentals of Mechanical Engineering Design VL 2	Basics of Electrical Engineering VL 3	Fluid Mechanics VL 3	Introduction to Control Systems VL 2	Integrated Product Development and Lightweight Design			
9		Fundamentals of Mechanical Engineering Design HÜ 2	Basics of Electrical Engineering GÜ 2	Fluid Mechanics HÜ 2	Introduction to Control Systems GÜ 2	Integrated Product Development I VL 2			
10	Mathematics I					Development of Lightweight Design Products VL 2			
11	Linear Algebra I VL 2					CAE-Team Project PBL 2			
12	Linear Algebra I GÜ 1	Technical Thermodynamics I		Technical Thermodynamics II		Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)		Measurement Technology for Mechanical and Process Engineers	
13	Linear Algebra I HÜ 1	Technical Thermodynamics I VL 2	Technical Thermodynamics II VL 2	Mechanics IV VL 3	Measurement Technology for Mechanical and Process Engineers VL 2	Bachelor Thesis			
14	Analysis I VL 2	Technical Thermodynamics I HÜ 1	Technical Thermodynamics II HÜ 1	Mechanics IV GÜ 2	Measurement Technology for Mechanical and Process Engineers HÜ 1				
15	Analysis I GÜ 1	Technical Thermodynamics I GÜ 1	Technical Thermodynamics II GÜ 1	Mechanics IV HÜ 1	Practical Course: Measurement and Control Systems PR 2				
16	Analysis I HÜ 1								
17									
18	Mechanics I (Statics)	Mechanics II: Mechanics of Materials		Mathematics III		Fundamentals of Production and Quality Management		Production Technology	
19	Mechanics I VL 2	Mechanics II VL 2	Analysis III VL 2	Production Process Organization VL 2	Forming and Cutting Technology VL 2				
20	Mechanics I GÜ 2	Mechanics II GÜ 2	Analysis III GÜ 1	Quality Management VL 2	Forming and Cutting Technology HÜ 1				
21	Mechanics I HÜ 1	Mechanics II HÜ 2	Analysis III HÜ 1		Fundamentals of Machine Tools VL 2				
22			Differential Equations 1 VL 2		Fundamentals of Machine Tools HÜ 1				
23			Differential Equations 1 GÜ 1						
24	Fundamentals of Materials Science (part 1)	Mathematics II		Mechanics III (Hydrostatics, Kinematics, Kinetics I)		Fundamentals of Production and Quality Management		Material Science Laboratory	
25	Fundamentals of Materials Science I VL 2	Linear Algebra II VL 2	Analysis III HÜ 1	Mechanics III VL 3	Companion Lecture for Materials Science Laboratory VL 2				
26	Physical and Chemical Basics of Materials Science VL 2	Linear Algebra II GÜ 1	Analysis III GÜ 1	Mechanics III GÜ 2	Material Science Laboratory PR 4				
27		Linear Algebra II HÜ 1	Differential Equations 1 VL 2	Mechanics III HÜ 1					
28	Team Project MB	Analysis II VL 2	Differential Equations 1 GÜ 1	Mechanics III HÜ 1					
29	Team Project MB TT 6	Analysis II HÜ 1							
30		Analysis II GÜ 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.

