

Course of Study Mechanical Engineering (Study Cohort w18)

Sample course plan C 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 GÜ 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		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		Measurement Technology for Mechanical Engineers		Bachelor Thesis	
13	Linear Algebra I HÜ 1	Technical Thermodynamics I VL 2	Technical Thermodynamics II VL 2	Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems) VL 3	Measurement Technology for Mechanical Engineering VL 2				
14	Analysis I VL 2	Technical Thermodynamics I HÜ 1	Technical Thermodynamics II HÜ 1	Mechanics IV GÜ 2	Measurement Technology for Mechanical Engineering HÜ 1				
15	Analysis I GÜ 1	Technical Thermodynamics I GÜ 1	Technical Thermodynamics II GÜ 1	Mechanics IV HÜ 1	Measurement Technology for Mechanical Engineering PR 2				
16	Analysis I HÜ 1				Practical Course: Measurement and Control Systems				
17									
18	Mechanics I (Statics)	Mechanics II: Mechanics of Materials		Mathematics III		Advanced Materials		Production Technology	
19	Mechanics I VL 2	Mechanics II VL 2	Analysis III VL 2	Advanced Materials Characterization VL 2	Forming and Cutting Technology VL 2				
20	Mechanics I GÜ 2	Mechanics II GÜ 2	Analysis III GÜ 1	Advanced Materials Design VL 2	Forming and Cutting Technology HÜ 1				
21	Mechanics I HÜ 1	Mechanics II HÜ 2	Analysis III HÜ 1	Advanced Materials Design HÜ 2	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			Differential Equations 1 HÜ 1						
24	Fundamentals of Materials Science (part 1)	Mathematics II		Mechanics III (Hydrostatics, Kinematics, Kinetics I)		Material Science Laboratory			
25	Fundamentals of Materials Science I VL 2	Linear Algebra II VL 2	Mechanics III VL 3	Material Science Laboratory Companion Lecture for Materials Science VL 2					
26	Physical and Chemical Basics of Materials Science VL 2	Linear Algebra II GÜ 1	Mechanics III GÜ 2	Material Science Laboratory Laboratory					
27		Linear Algebra II HÜ 1	Mechanics III HÜ 1	Material Science Laboratory					
28		Analysis II VL 2	Mechanics III GÜ 2						
29	Team Project MB	Analysis II HÜ 1	Mechanics III HÜ 1						
30	Team Project MB PBL 6	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.

