

Course of Study Mechanical Engineering (Study Cohort w18)

Sample course plan A Bachelor Mechanical Engineering (MBBS)

Specialisation: Product Development and Production

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

