

Course of Study Mechanical Engineering (Study Cohort w21)

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	Mathematics I		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		Introduction to Control Systems		
9	Analysis I GÜ 1	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	Analysis I HÜ 1		Basics of Electrical Engineering GÜ 2	Fluid Mechanics HÜ 2	Introduction to Control Systems GÜ 2		Integrated Product Development I VL 2		
11							Development of Lightweight Design Products VL 2		
12	Mechanics I (Statics)		Technical Thermodynamics I				CAE-Team Project PBL 2		
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	Mechanics IV VL 3	Measurement Technology for Mechanical Engineering VL 2	Bachelor Thesis		
15	Mechanics I HÜ 1	Technical Thermodynamics I GÜ 1	Technical Thermodynamics II GÜ 1	Technical Thermodynamics II GÜ 1	Mechanics IV GÜ 2	Measurement Technology for Mechanical Engineering HÜ 1			
16					Mechanics IV HÜ 1	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		Electrical Machines and Actuators		Production Technology		
20	Physical and Chemical Basics of Materials Science VL 2	Mechanics II GÜ 2	Analysis III VL 2	Analysis III GÜ 1	Electrical Machines and Actuators VL 3	Forming and Cutting Technology VL 2	Forming and Cutting Technology HÜ 1		
21		Mechanics II HÜ 2	Analysis III HÜ 1	Electrical Machines and Actuators HÜ 2		Fundamentals of Machine Tools VL 2	Fundamentals of Machine Tools HÜ 1		
22	Team Project MB		Differential Equations 1 VL 2						
23	Team Project MB PBL 6		Differential Equations 1 GÜ 1						
24			Differential Equations 1 HÜ 1						
25		Mathematics II				Material Science Laboratory			
26		Linear Algebra II VL 2				Companion Lecture for Materials Science Laboratory VL 2			
27		Linear Algebra II GÜ 1				Material Science Laboratory PR 4			
28		Linear Algebra II HÜ 1							
29	Computer Science for Engineers - Introduction and Overview		Analysis II VL 2	Mechanics III (Dynamics)					
30	Computer Science for Engineers - Introduction and Overview VL 3	Analysis II HÜ 1	Analysis II GÜ 1	Mechanics III VL 3					
31	Computer Science for Engineers - Introduction and Overview GÜ 2	Analysis II HÜ 1		Mechanics III GÜ 2					
32				Mechanics III HÜ 1					
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.

