

Course of Study Mechanical Engineering (Study Cohort w23)

Sample course plan B Bachelor Mechanical Engineering (MBBS)

Legend	Core Qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
	Core Qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

Specialisation Materials in Engineering Sciences

1	Mathematics I		Fundamentals of Mechanical Engineering Design	Advanced Mechanical Engineering Design (part 1)	Advanced Mechanical Engineering Design (part 2)	Advanced Mechanical Design Project	Foundations of Management
2	Mathematics I VL 4		Fundamentals of Mechanical Engineering Design 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	Mathematics I HÜ 2		Fundamentals of Mechanical Engineering Design HÜ 2	Advanced Mechanical Engineering Design I HÜ 2	Advanced Mechanical Engineering Design II HÜ 2		Management Tutorial GÜ 2
4	Mathematics I GÜ 2						
5				Mechanical Engineering: Design (part 1)	Mechanical Engineering: Design (part 2)		
6				Embodiment Design and 3D-CAD Introduction and Practical Training VL 2	Team Project Design Methodology PBL 2		
7				Mechanical Design Project I PBL 3	Mechanical Design Project II PBL 3		
8			Technical Thermodynamics I	Basics of Electrical Engineering	Fluid Dynamics	Introduction to Control Systems	Enhanced Fundamentals of Materials Science
9	Fundamentals of Materials Science		Technical Thermodynamics I VL 2	Basics of Electrical Engineering VL 3	Fluid Mechanics VL 3	Introduction to Control Systems VL 2	Materials for Energy Storage and Conversion VL 2
10	Fundamentals of Materials Science II VL 2		Technical Thermodynamics I HÜ 1	Basics of Electrical Engineering GÜ 2	Fluid Mechanics HÜ 2	Introduction to Control Systems GÜ 2	Advanced Ceramics and Polymers VL 2
11	Fundamentals of Materials Science I VL 2		Technical Thermodynamics I GÜ 1				Advanced Ceramics and Polymers HÜ 1
12	Physical and Chemical Basics of Materials Science VL 2						
13			Production Engineering	Technical Thermodynamics II	Computational Mechanics	Measurement Technology for Mechanical Engineers	Materials Engineering: Materials Selection, Processing and Modelling
14			Production Engineering I VL 2	Technical Thermodynamics II VL 2	Computational Multibody Dynamics IV 2	Measurement Technology for Mechanical Engineering VL 2	Materials Selection and Processing VL 3
15	Team Project MB		Production Engineering II VL 2	Technical Thermodynamics II HÜ 1	Computational Mechanics GÜ 2	Measurement Technology for Mechanical Engineering PR 2	Materials and Process Modeling VL 3
16	Team Project MB PBL 6		Production Engineering II HÜ 1	Technical Thermodynamics II GÜ 1	Computational Structural Mechanics IV 2	Measurement Technology for Mechanical Engineering PR 2	
17			Production Engineering I HÜ 1			Practical Course: Measurement and Control Systems PR 2	
18							
19			Mathematics II	Mathematics III	Fundamentals of Production and Quality Management	Materials Science Laboratory	Bachelor Thesis
20			Mathematics II VL 4	Analysis III VL 2	Production Process Organization VL 2	Companion Lecture for Materials Science Laboratory VL 2	
21	Computer Science for Engineers - Introduction and Overview		Mathematics II HÜ 2	Analysis III GÜ 1	Quality Management VL 2	Material Science Laboratory PR 4	
22	Computer Science for Engineers - Introduction and Overview VL 3		Mathematics II GÜ 2	Analysis III HÜ 1			
23				Differential Equations 1 VL 2			
24	Computer Science for Engineers - Introduction and Overview GÜ 2			Differential Equations 1 GÜ 1			
25				Differential Equations 1 HÜ 1			
26							
27	Engineering Mechanics I (Stereostatics)		Engineering Mechanics II (Elastostatics)	Engineering Mechanics III (Dynamics)			
28	Engineering Mechanics I VL 2		Engineering Mechanics II VL 2	Engineering Mechanics III VL 3			
29	Engineering Mechanics I GÜ 2		Engineering Mechanics II GÜ 2	Engineering Mechanics III GÜ 2			
30	Engineering Mechanics I HÜ 1		Engineering Mechanics II HÜ 2	Engineering Mechanics III HÜ 1			
31							
32							

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.

