Course of Study Mechanical Engineering (Study Cohort w23)

Sample course plan C Bachelor Mechanical Engineering (MBBS) Dual study program

	isation Materials in Engineering Scie	nces				
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
	Mathematics I HŪ 2	Fundamentals of Mechanical Engineering Design HÜ 2	Advanced Mechanical Engineering Design I HÜ 2	Advanced Mechanical Engineering Design II HŪ 2		Management Tutorial GŪ 2
3	Mathematics I GÜ 2					
4			Mechanical Engineering: Design (part 1)	Mechanical Engineering: Design (part 2)		
5			Embodiment Design and 3D-CAD Introduction VL 2	Team Project Design Methodology PBL 2		
6			and Practical Training	Mechanical Design Project II PBL 3		
7			Mechanical Design Project I PBL 3			
		Technical Thermodynamics I	Basics of Electrical Engineering	Fluid Dynamics	Introduction to Control Systems	Enhanced Fundamentals of Materials Science
8		Technical Thermodynamics I VL 2 Technical Thermodynamics I HÜ 1	Basics of Electrical Engineering VL 3 Basics of Electrical Engineering GŪ 2	Fluid Mechanics VL 3 Fluid Mechanics HÜ 2	Introduction to Control Systems VL 2 Introduction to Control Systems GÜ 2	Materials for Energy Storage and Conversion VL 2 Enhanced Fundamentals: Ceramics and VL 2
9	Fundamentals of Materials Science	Technical Thermodynamics I GÜ 1	basics of Electrical Engineering 00 2			Polymers
10	Fundamentals of Materials Science II VL 2					Enhanced Fundamentals: Ceramics and HÜ 1
11	Fundamentals of Materials Science I VL 2					Polymers
	Physical and Chemical Basics of Materials Science VL 2					
12						
13		Production Engineering	Technical Thermodynamics II	Practical module 4 (dual study program, Bachelor's	Measurement Technology for Mechanical Engineers	Materials Engineering: Materials Selection,
14		Production Engineering I VL 2	Technical Thermodynamics II VL 2	degree)	Measurement Technology for Mechanical VL 2	Processing and Modelling
15	Trans Declark MD	Production Engineering II VL 2	Technical Thermodynamics II HÜ 1	Practical term 4 0	Engineering	Materials Selection and Processing VL 3
	Team Project MB Team Project MB PBL 6	Production Engineering II HÜ 1	Technical Thermodynamics II GŪ 1		Measurement Technology for Mechanical PR 2 Engineering	Materials and Process Modeling VL 3
16	ream roject mb	Production Engineering I HÜ 1			Practical Course: Measurement and Control PR 2	
17					Systems	
18						
19		Mathematics II	Mathematics III	Computational Mechanics	Practical module 5 (dual study program, Bachelor's	Bachelor thesis (dual study program)
		Mathematics II VL 4	Analysis III VL 2	Computational Multibody Dynamics IV 2	degree)	Bachelor thesis (dual study program)
20		Mathematics II HÜ 2	Analysis III GÜ 1	Computational Mechanics GÜ 2	Practical term 5 0	
21	Computer Science for Engineers - Introduction and	Mathematics II GÜ 2	Analysis III HÜ 1	Computational Stuctural Mechanics IV 2		
22	Overview		Differential Equations 1 VL 2			
23	Computer Science for Engineers - Introduction VL 3 and Overview		Differential Equations 1 GÜ 1			
24	Computer Science for Engineers - Introduction GÜ 2		Differential Equations 1 HÜ 1			
	and Overview					
25				Advanced Materials for Sustainability	Materials Science Laboratory	
26				Advanced Materials Characterization VL 2	Companion Lecture for Materials Science VL 2 Laboratory	
27	Practical module 1 (dual study program, Bachelor's	Practical module 2 (dual study program, Bachelor's	Practical module 3 (dual study program, Bachelor's	Advanced Materials for Sustainability VL 2 Advanced Materials for Sustainability HŪ 2	Material Science Laboratory PR 4	
28	degree)	degree)	degree)	Auvanceu materiais for Sustainability HU 2		
	Practical term 1 0	Practical term 2 0	Practical term 3 0			
29						
30						
31						
32						
33						
	Engineering Mechanics I (Stereostatics) Engineering Mechanics I VL 2	Engineering Mechanics II (Elastostatics) Engineering Mechanics II VL 2	Engineering Mechanics III (Dynamics) Engineering Mechanics III VL 3			
34	Engineering Mechanics I VL 2 Engineering Mechanics I GÜ 2	Engineering Mechanics II VL 2 Engineering Mechanics II GÜ 2	Engineering Mechanics III VL 3 Engineering Mechanics III GŪ 2			
35	Engineering Mechanics I HŪ 1	Engineering Mechanics II HÜ 2	Engineering Mechanics III HÜ 1			
36						
37						
37						
37 38		am, Bachelor's degree) (from catalogue) - 6LP				

Focus Compulsory

Core Qualification Elective Compulsory Specialisation Elective Compulsory Focus Elective Compulsory

Thesis Compulsory

Interdisciplinary complement

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.