Course of Study Mechanical Engineering (Study Cohort w14)

Sample course plan B Bachelor Mechanical Engineering (MBBS)
Specialisation Product Development and Production

Legend:

Core qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
Core qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

LP	Semester 1	FormHrs/wk	Semester 2	FormHrs/wk	Semester 3	FormHrs/wk	Semester 4	FormHrs/wk	Semester 5	FormHrs/wk	Semester 6	FormHrs/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**		**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	TT 4	Introduction to Management	VL 4
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			Project Entrepreneurship	POL 2
4	**Informatik für Maschinenbau-Ingenieure (part 1)**		**Informatik für Maschinenbau-Ingenieure (part 2)**		**Mechanical Engineering: Design (part 1)**		**Mechanical Engineering: Design (part 2)**					
5	Informatik für Maschinenbau-Ingenieure I	VL 2	Informatik für Maschinenbau-Ingenieure II	VL 2	Embodiment Design and 3D-CAD	VL 2	Team Project Design Methodology	POL 2				
	Informatik für Maschinenbau-Ingenieure I	UE 2	Informatik für Maschinenbau-Ingenieure II	UE 2	Mechanical Design Project I	TT 3	Mechanical Design Project II	TT 3				
6	Informatik für Maschinenbau-Ingenieure I	HÜ 1	**Fundamentals of Materials Science (part 2)**									
7			Fundamentals of Materials Science II	VL 2	**Basics of Electrical Engineering**		**Fluid Dynamics**		**Introduction to Control Systems**		**Integrated Product Development and Lightweight Design**	
8	**Mathematics I**		**Fundamentals of Mechanical Engineering Design**		Basics of Electrical Engineering	VL 3	Fluid Mechanics	VL 3	Introduction to Control Systems	VL 2	Integrated Product Development I	VL 2
9	Linear Algebra I	VL 2	Fundamentals of Mechanical Engineering Design	VL 2	Basics of Electrical Engineering	UE 2	Fluid Mechanics	HÜ 1	Introduction to Control Systems	UE 2	Development of Lightweight Design Products	VL 2
10	Linear Algebra I	UE 1	Fundamentals of Mechanical Engineering Design	HÜ 2							CAE-Team Project	POL 2
11	Linear Algebra I	HÜ 1										
12	Analysis I	VL 2										
13	Analysis I	UE 1			**Technical Thermodynamics II**		**Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)**		**Measurement Technology for Mechanical and Process Engineers**		**Bachelor Thesis**	
14	Analysis I	HÜ 1	**Technical Thermodynamics I**		Technical Thermodynamics II	VL 2	Mechanics IV	VL 3	Measurement Technology for Mechanical and Process Engineers	VL 2		
15			Technical Thermodynamics I	VL 2	Technical Thermodynamics II	HÜ 1	Mechanics IV	UE 2	Measurement Technology for Mechanical and Process Engineers	HÜ 1		
16	**Mechanics I (Statics)**		Technical Thermodynamics I	HÜ 1	Technical Thermodynamics II	UE 1	Mechanics IV	HÜ 1	Practical Course: Measurement and Control Systems	PR 2		
17	Mechanics I	VL 2	Technical Thermodynamics I	UE 1								
18	Mechanics I	UE 2										
19	Mechanics I	HÜ 1			**Mathematics III**		**Fundamentals of Production and Quality Management**		**Production Technology**			
20			**Mechanics II: Mechanics of Materials**		Analysis III	VL 2	Production Process Organization	VL 2	Forming and Cutting Technology	VL 2		
21			Mechanics II	VL 2	Analysis III	UE 1	Quality Management	VL 2	Forming and Cutting Technology	HÜ 1		
22	**Fundamentals of Materials Science (part 1)**		Mechanics II	UE 2	Analysis III	HÜ 1			Fundamentals of Machine Tools	VL 3		
23	Fundamentals of Materials Science I	VL 2			Differential Equations 1	VL 2						
24	Physical and Chemical Basics of Materials Science	VL 2			Differential Equations 1	UE 1						
25					Differential Equations 1	HÜ 1			**Material Science Laboratory**			
26	**Team Project MB**		**Mathematics II**						Companion Lecture for Materials Science Laboratory	VL 2		
27	Team Project MB	TT 6	Linear Algebra II	VL 2	**Mechanics III (Hydrostatics, Kinematics, Kinetics I)**				Material Science Laboratory	PR 4		
28			Linear Algebra II	UE 1	Mechanics III	VL 3						
29			Linear Algebra II	HÜ 1	Mechanics III	UE 2						
30			Analysis II	VL 2	Mechanics III	HÜ 1						
			Analysis II	HÜ 1								
			Analysis II	UE 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.