

Course of Study Mechanical Engineering (Study Cohort w23)

Sample course plan A Bachelor Mechanical Engineering (MBBS)

Specialisation Energy Systems																			
1	Mathematics I Mathematics I VL 4 Mathematics I HÜ 2 Mathematics I GÜ 2	Fundamentals of Mechanical Engineering Design Fundamentals of Mechanical Engineering Design VL 2 Fundamentals of Mechanical Engineering Design HÜ 2	Advanced Mechanical Engineering Design (part 1) Advanced Mechanical Engineering Design I VL 2 Advanced Mechanical Engineering Design I HÜ 2			Advanced Mechanical Engineering Design (part 2) Advanced Mechanical Engineering Design II VL 2 Advanced Mechanical Engineering Design II HÜ 2			Advanced Mechanical Design Project Advanced Mechanical Design Project PBL 4			Foundations of Management Introduction to Management VL 3 Management Tutorial GÜ 2							
2																			
3																			
4					Mechanical Engineering: Design (part 1) Embodiment Design and 3D-CAD Introduction and Practical Training VL 2 Mechanical Design Project I PBL 3			Mechanical Engineering: Design (part 2) Team Project Design Methodology PBL 2 Mechanical Design Project II PBL 3											
5					Technical Thermodynamics I Technical Thermodynamics I VL 2 Technical Thermodynamics I HÜ 1 Technical Thermodynamics I GÜ 1			Basics of Electrical Engineering Basics of Electrical Engineering VL 3 Basics of Electrical Engineering GÜ 2			Fluid Dynamics Fluid Mechanics VL 3 Fluid Mechanics HÜ 2			Introduction to Control Systems Introduction to Control Systems VL 2 Introduction to Control Systems GÜ 2			Reciprocating Machinery (part 2) Internal Combustion Engines I VL 2 Internal Combustion Engines I HÜ 1		
6																			
7																			
8	Fundamentals of Materials Science Fundamentals of Materials Science II VL 2 Fundamentals of Materials Science I VL 2 Physical and Chemical Basics of Materials Science VL 2	Production Engineering Production Engineering I VL 2 Production Engineering II VL 2 Production Engineering II HÜ 1 Production Engineering I HÜ 1	Technical Thermodynamics II Technical Thermodynamics II VL 2 Technical Thermodynamics II HÜ 1 Technical Thermodynamics II GÜ 1			Computational Mechanics Computational Multibody Dynamics IV 2 Computational Mechanics GÜ 2 Computational Structural Mechanics IV 2			Measurement Technology for Mechanical Engineers Measurement Technology for Mechanical VL 2 Engineering Measurement Technology for Mechanical PR 2 Engineering Practical Course: Measurement and Control PR 2 Systems			Bachelor Thesis							
9																			
10																			
11																			
12																			
13																			
14																			
15	Team Project MB Team Project MB PBL 6	Mathematics II Mathematics II VL 4 Mathematics II HÜ 2 Mathematics II GÜ 2	Mathematics III Analysis III VL 2 Analysis III GÜ 1 Analysis III HÜ 1 Differential Equations 1 VL 2 Differential Equations 1 GÜ 1 Differential Equations 1 HÜ 1			Electrical Machines and Actuators Electrical Machines and Actuators VL 3 Electrical Machines and Actuators HÜ 2			Heat Transfer Heat Transfer VL 3 Heat Transfer HÜ 2										
16																			
17																			
18																			
19																			
20																			
21																			
22	Computer Science for Engineers - Introduction and Overview Computer Science for Engineers - Introduction VL 3 and Overview Computer Science for Engineers - Introduction GÜ 2 and Overview																		
23																			
24																			
25																			
26																			
27																			
28																			
29	Engineering Mechanics I (Stereostatics) Engineering Mechanics I VL 2 Engineering Mechanics I GÜ 2 Engineering Mechanics I HÜ 1	Engineering Mechanics II (Elastostatics) Engineering Mechanics II VL 2 Engineering Mechanics II GÜ 2 Engineering Mechanics II HÜ 2	Engineering Mechanics III (Dynamics) Engineering Mechanics III VL 3 Engineering Mechanics III GÜ 2 Engineering Mechanics III HÜ 1						Reciprocating Machinery (part 1) Fundamentals of Reciprocating Engines and Turbomachinery - Part Reciprocating Engines VL 1 Fundamentals of Reciprocating Engines and Turbomachinery - Part Reciprocating Engines HÜ 1										
30																			
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.

