

Course of Study Mechanical Engineering (Study Cohort w23)

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

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
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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	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
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15	Team Project MB Team Project MB PBL 6	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		Practical module 4 (dual study program, Bachelor's degree) Practical term 4 0		Measurement Technology for Mechanical Engineers Measurement Technology for Mechanical Engineering VL 2 Measurement Technology for Mechanical Engineering PR 2 Practical Course: Measurement and Control Systems PR 2		Bachelor thesis (dual study program)
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22	Computer Science for Engineers - Introduction and Overview Computer Science for Engineers - Introduction and Overview VL 3 Computer Science for Engineers - Introduction and Overview GÜ 2	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		Computational Mechanics Computational Multibody Dynamics IV 2 Computational Mechanics GÜ 2 Computational Structural Mechanics IV 2		Practical module 5 (dual study program, Bachelor's degree) Practical term 5 0		
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29	Practical module 1 (dual study program, Bachelor's degree) Practical term 1 0	Practical module 2 (dual study program, Bachelor's degree) Practical term 2 0	Practical module 3 (dual study program, Bachelor's degree) Practical term 3 0		Advanced Materials for Sustainability Advanced Materials Characterization VL 2 Advanced Materials for Sustainability VL 2 Advanced Materials for Sustainability HÜ 2		Heat Transfer Heat Transfer VL 3 Heat Transfer HÜ 2		
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36	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		Gas and Steam Power Plants Gas and Steam Power Plants VL 3 Gas and Steam Power Plants HÜ 1		
37									
38									
Linking theory and practice (dual study program, Bachelor's degree) (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.

