

Course of Study Mechanical Engineering (Study Cohort w23)

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

Specialisation Aircraft Systems Engineering												
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					
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6												
7												
8	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		Digital Product Development and Lightweight Design Digital Product Development VL 2 Development of Lightweight Design Products VL 2 CAE-Team Project PBL 2			
9												
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11												
12	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 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		Aeronautical Systems Air Transportation Systems VL 2 Fundamentals of Aircraft Systems VL 2 Fundamentals of Aircraft Systems GÜ 1 Air Transportation Systems HÜ 1			
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19	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		Bachelor thesis (dual study program)			
20												
21												
22												
23	Computer Science for Engineers - Introduction and Overview Computer Science for Engineers - Introduction VL 3 Computer Science for Engineers - Introduction and Overview GÜ 2		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				Modeling, Simulation and Optimization (EN) Modeling, Simulation and Optimization IV 4	
24												
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27	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		Electrical Machines and Actuators Electrical Machines and Actuators VL 3 Electrical Machines and Actuators HÜ 2					
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31	Linking theory and practice (dual study program, Bachelor's degree) (from catalogue) - 6LP											
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The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.

