

Course of Study Mechanical Engineering (Study Cohort w23)

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

Specialisation Biomechanics										
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			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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7	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	MED II: Introduction to Physiology Introduction to Physiology VL 2		
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13	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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19	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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25	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		MED I: Introduction to Anatomy Introduction to Anatomy VL 2		MED II: Introduction to Biochemistry and Molecular Biology Introduction to Biochemistry and Molecular Biology VL 2			
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31	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		MED I: Introduction to Radiology and Radiation Therapy Introduction to Radiology and Radiation Therapy VL 2		BIO I: Implants and Fracture Healing Implants and Fracture Healing VL 2			
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37	Electrical Machines and Actuators Electrical Machines and Actuators VL 3 Electrical Machines and Actuators HÜ 2									
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Linking theory and practice (dual study program, Bachelor's degree) - 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.

