

Course of Study Mechanical Engineering (Study Cohort w23)

Sample course plan A 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 |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | 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 | | | | |
| 9 | 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 |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | 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) |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | 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 | | |
| 24 | | | | | | | | | |
| 25 | | | | | | | | | |
| 26 | | | | | | | | | |
| 27 | | | | | | | | | |
| 28 | | | | | | | | | |
| 29 | | | | | | | | | |
| 30 | 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 | | 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 | | |
| 31 | | | | | | | | | |
| 32 | | | | | | | | | |
| 33 | | | | | | | | | |
| 34 | | | | | | | | | |
| 35 | | | | | | | | | |
| 36 | | | | | | | | | |
| 37 | 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 | | |
| 38 | | | | | | | | | |
| Gas and Steam Power Plants Gas and Steam Power Plants VL 3 Gas and Steam Power Plants HÜ 1 | | | | | | | | | |
| 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.

