

Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w19)

Sample course plan A Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))

Specialisation Mechanical Engineering, Focus Mechatronics														
1	Chemistry Chemistry I VL 2 Chemistry II VL 2 Chemistry I HÜ 1 Chemistry II HÜ 1		Electrical Engineering II: Alternating Current Networks and Basic Devices Electrical Engineering II: Alternating Current Networks and Basic Devices VL 3 Electrical Engineering II: Alternating Current Networks and Basic Devices GÜ 2 Current Networks and Basic Devices		Technical Thermodynamics II Technical Thermodynamics II VL 2 Technical Thermodynamics II HÜ 1 Technical Thermodynamics II GÜ 1		Signals and Systems Signals and Systems VL 3 Signals and Systems GÜ 2		Introduction to Control Systems Introduction to Control Systems VL 2 Introduction to Control Systems GÜ 2		Foundations of Management Introduction to Management VL 3 Management Tutorial GÜ 2		Advanced Internship AIW/ ES Advanced Internship AIW/ ES: Preparation SE 1 Advanced Intenship AIW/ ES: Internship-accompanying Seminar SE 1	
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7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields Electrical Engineering I: Direct Current Networks and Electromagnetic Fields VL 3 Electrical Engineering I: Direct Current Networks and Electromagnetic Fields GÜ 2		Fundamentals of Mechanical Engineering Design Fundamentals of Mechanical Engineering Design VL 2 Fundamentals of Mechanical Engineering Design HÜ 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		Fluid Dynamics Fluid Mechanics VL 3 Fluid Mechanics HÜ 2		Computer Engineering Computer Engineering VL 3 Computer Engineering GÜ 1		Electrical Machines and Actuators Electrical Machines and Actuators VL 3 Electrical Machines and Actuators HÜ 2			
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13	Mathematics I Linear Algebra I VL 2 Linear Algebra I GÜ 1 Linear Algebra I HÜ 1 Analysis I VL 2 Analysis I GÜ 1 Analysis I HÜ 1		Technical Thermodynamics I Technical Thermodynamics I VL 2 Technical Thermodynamics I HÜ 1 Technical Thermodynamics I GÜ 1		Mechanics III (Dynamics) Mechanics III VL 3 Mechanics III GÜ 2 Mechanics III HÜ 1		Mechanics IV (Oscillations, Analytical Mechanics, Multibody Systems, Numerical Mechanics) Mechanics IV VL 3 Mechanics IV GÜ 2 Mechanics IV HÜ 1		Measurement Technology for Mechanical Engineers Measurement Technology for Mechanical Engineering VL 2 Measurement Technology for Mechanical Engineering HÜ 1 Practical Course: Measurement and Control Systems PR 2		Semiconductor Circuit Design Semiconductor Circuit Design VL 3 Semiconductor Circuit Design GÜ 1			
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19	Mechanics I (Statics) Mechanics I VL 2 Mechanics I GÜ 2 Mechanics I HÜ 1		Mechanics II: Mechanics of Materials Mechanics II VL 2 Mechanics II GÜ 2 Mechanics II HÜ 2		Mechanical Engineering: Design (part 1) Embodiment Design and 3D-CAD 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		Electrical Engineering III: Circuit Theory and Transients Circuit Theory VL 3 Circuit Theory GÜ 2		Mathematics IV Complex Functions VL 2 Complex Functions GÜ 1 Complex Functions HÜ 1 Differential Equations 2 VL 2 Differential Equations 2 GÜ 1 Differential Equations 2 HÜ 1			
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25	Programming in C Programming in C VL 1 Programming in C PR 1		Mathematics II Linear Algebra II VL 2 Linear Algebra II GÜ 1 Linear Algebra II HÜ 1 Analysis II VL 2 Analysis II HÜ 1 Analysis II GÜ 1		Fundamentals of Materials Science (part 1) Fundamentals of Materials Science I VL 2 Physical and Chemical Basics of Materials Science VL 2		Fundamentals of Materials Science (part 2) Fundamentals of Materials Science II VL 2		Advanced Mechanical Engineering Design (part 2) Advanced Mechanical Engineering Design II VL 2 Advanced Mechanical Engineering Design II HÜ 2		Numerical Mathematics I Numerical Mathematics I VL 2 Numerical Mathematics I GÜ 2			
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31	Physics for Engineers (AIW) Physics for Engineers VL 2 Physics for Engineers GÜ 1				Advanced Mechanical Engineering Design (part 1) Advanced Mechanical Engineering Design I VL 2 Advanced Mechanical Engineering Design I HÜ 2									
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.

