

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

Sample course plan B Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))
Specialisation Energy and Environmental Engineering

Legend:

Core qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
Core qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

LP	Semester 1	Form/hrs	Semester 2	Form/hrs	Semester 3	Form/hrs	Semester 4	Form/hrs	Semester 5	Form/hrs	Semester 6	Form/hrs	Semester 7	Form/hrs/wk														
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: VL 3 Alternating Current Networks and Basic Devices Electrical Engineering II: UE 2 Alternating Current Networks and Basic Devices	Technical Thermodynamics II	Technical Thermodynamics II Technical Thermodynamics II Technical Thermodynamics II	Mechanical Engineering: Design (part 2)	Team Project Design PBL2 Methodology Mechanical Design PBL3 Project II	Introduction to Control Systems	Introduction to Control VL 2 Systems Introduction to Control UE 2 Systems	Foundations of Management	Introduction to Management VL 3 Management Tutorial HÜ 2	Advanced Internship GES															
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7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	Electrical Engineering I: VL 3 Direct Current Networks and Electromagnetic Fields Electrical Engineering I: UE 2 Direct Current Networks and Electromagnetic Fields	Fundamentals of Mechanical Engineering Design	Fundamentals of VL 2 Mechanical Engineering Design Fundamentals of HÜ 2 Mechanical Engineering Design	Mathematics III	Analysis III VL 2 Analysis III UE 1 Analysis III HÜ 1 Differential Equations 1 VL 2 Differential Equations 1 UE 1 Differential Equations 1 HÜ 1	Fundamentals of Fluid Mechanics	Fundamentals of Fluid VL 2 Mechanics Fluid Mechanics for HÜ 2 Process Engineering	Heat and Mass Transfer	Heat and Mass Transfer VL 2 Heat and Mass Transfer UE 1 Heat and Mass Transfer HÜ 1	Environmental Technology (part 2)	Practical Exercise PR 1 Environmental Technology	Particle Technology and Solids Process Engineering	Particle Technology I VL 2 Particle Technology I UE 1 Particle Technology I PR 2														
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19	Mechanics I (Statics)	Mechanics I VL 2 Mechanics I UE 2 Mechanics I HÜ 1	Mechanics II: Mechanics of Materials	Mechanics II VL 2 Mechanics II UE 2 Mechanics II HÜ 2	Computer Engineering	Computer Engineering VL 3 Computer Engineering UE 1	Renewables and Energy Systems	Renewable Energy VL 2 Energy Systems and VL 2 Energy Industry Power Industry VL 1 Renewable Energy UE 1	Gas and Steam Power Plants	Gas and Steam Power VL 3 Plants Gas and Steam Power HÜ 1 Plants	Separation Processes PR 1	Process and Plant Engineering I	Process and Plant VL 2 Engineering I Process and Plant HÜ 1 Engineering I Process and Plant UE 1 Engineering I	Bachelor Thesis														
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Nontechnical Complementary 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.

Mathematics II

Linear Algebra II VL 2
 Linear Algebra II UE 1
 Linear Algebra II HÜ 1
 Analysis II VL 2
 Analysis II HÜ 1
 Analysis II UE 1

Programming in C

Programming in C VL 1
 Programming in C PR 1

Physics for Engineers (AIW)

Physics for Engineers VL 2
 Physics for Engineers UE 1

Mechanical Engineering: Design (part 1)

Embodiment Design and 3D-CAD VL 2
 Mechanical Design Project I PBL3

Fundamentals of Materials Science (part 1)

Fundamentals of Materials Science I VL 2
 Physical and Chemical Basics of Materials Science VL 2

Measurement Technology for Mechanical and Process Engineers

Measurement Technology for Mechanical and Process Engineers VL 2
 Measurement Technology for Mechanical and Process Engineers HÜ 1
 Practical Course: Measurement and Control Systems PR 2

Environmental Technology (part 1)

Environmental Technologie VL 2