

# Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w18)

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	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7
1	<b>Chemistry</b> Chemistry I Chemistry II Chemistry I Chemistry II	<b>Electrical Engineering II: Alternating Current Networks and Basic Devices</b> Electrical Engineering II: Alternating Current Networks and Basic Devices Electrical Engineering II: Alternating Current Networks and Basic Devices	<b>Technical Thermodynamics II</b> Technical Thermodynamics II Technical Thermodynamics II Technical Thermodynamics II	<b>Mechanical Engineering: Design (part 2)</b> Team Project Design Mechanical Design Project II <b>Fundamentals of Materials Science (part 2)</b> Fundamentals of Materials Science II	<b>Introduction to Control Systems</b> Introduction to Control Systems Introduction to Control Systems <b>Fundamentals of Fluid Mechanics</b> Fundamentals of Fluid Mechanics Fluid Mechanics for Process Engineering <b>Electrical Machines and Actuators</b> Electrical Machines and Actuators Electrical Machines and Actuators	<b>Foundations of Management</b> Introduction to Management Management Tutorial	<b>Advanced Internship AIW/GES</b>
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7	<b>Electrical Engineering I: Direct Current Networks and Electromagnetic Fields</b> Electrical Engineering I: Direct Current Networks and Electromagnetic Fields Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	<b>Fundamentals of Mechanical Engineering Design</b> Fundamentals of Mechanical Engineering Design Fundamentals of Mechanical Engineering Design	<b>Mathematics III</b> Analysis III Analysis III Analysis III Differential Equations 1 Differential Equations 1 Differential Equations 1	<b>Heat and Mass Transfer</b> Heat and Mass Transfer Heat and Mass Transfer Heat and Mass Transfer <b>Thermal Separation Processes</b> Thermal Separation Processes Thermal Separation Processes Thermal Separation Processes <b>Renewables and Energy Systems</b> Renewable Energy Energy Systems and	<b>Particle Technology and Solids Process Engineering</b> Particle Technology I Particle Technology I Particle Technology I <b>Environmental Technology</b> Environmental Assessment Environmental Assessment Environmental Assessment <b>Environmental Technology (part 2)</b> Practical Exercise Environmental Technology <b>Process and Plant Engineering I</b> Process and Plant Engineering I Process and Plant Engineering I	<b>Bachelor Thesis</b>	
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17	<b>Mathematics I</b> Linear Algebra I Linear Algebra I Linear Algebra I Analysis I Analysis I	<b>Technical Thermodynamics I</b> Technical Thermodynamics I Technical Thermodynamics I Technical Thermodynamics I	<b>Mechanics III (Hydrostatics, Kinematics, Kinetics I)</b> Mechanics III Mechanics III Mechanics III	<b>Measurement Technology for Mechanical Engineers</b> Measurement			
18							
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21							

22	Mechanics I VL 2 Mechanics I UE 2 Mechanics I HÜ 1	Mechanics II UE 2 Mechanics II HÜ 2	Computer Engineering VL 3 Computer Engineering UE 1	Energy Industry Power Industry VL 1 Renewable Energy UE 1	Technology for Mechanical Engineering Measurement HÜ 1 Technology for Mechanical Engineering Practical Course: Measurement and Control Systems PR 2	Engineering I Process and Plant Engineering I UE 1
23						
24						
25		<b>Mathematics II</b>			<b>Environmental Technology (part 1)</b>	
26		Linear Algebra II VL 2 Linear Algebra II UE 1 Linear Algebra II HÜ 1			Environmental Technologie VL 2	
27	<b>Programming in C</b>	Analysis II VL 2	<b>Mechanical Engineering: Design (part 1)</b>		<b>Computational Fluid Dynamics I</b>	
28	Programming in C VL 1 Programming in C PR 1	Analysis II HÜ 1 Analysis II UE 1	Embodiment Design VL 2 and 3D-CAD Mechanical Design PBL3 Project I		Computational Fluid Dynamics I VL 2 Computational Fluid Dynamics I HÜ 2	
29	<b>Physics for Engineers (AIW)</b>					
30	Physics for Engineers VL 2		<b>Fundamentals of Materials Science (part 1)</b>			
31	Physics for Engineers UE 1		Fundamentals of Materials Science I VL 2			
32			Physical and Chemical Basics of Materials Science VL 2			
33						

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.