

# Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w17)

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	<b>Chemistry</b>	VL 2	<b>Electrical Engineering II: Alternating Current Networks and Basic Devices</b>	VL 3	<b>Technical Thermodynamics II</b>	VL 2	<b>Mechanical Engineering: Design (part 2)</b>	PBL2	<b>Introduction to Control Systems</b>	VL 2	<b>Foundations of Management</b>	VL 3	<b>Advanced Internship AIW/GES</b>						
2															Chemistry I	Technical Thermodynamics II	Team Project Design Methodology	Introduction to Control Systems	Introduction to Management
3															Chemistry II	Technical Thermodynamics II	Mechanical Design Project II	Introduction to Control Systems	Management Tutorial
4															Chemistry I	Technical Thermodynamics II			
5															Chemistry II	Technical Thermodynamics II	<b>Fundamentals of Materials Science (part 2)</b>		
6																	Fundamentals of Materials Science II		
7	<b>Electrical Engineering I: Direct Current Networks and Electromagnetic Fields</b>	VL 3	<b>Fundamentals of Mechanical Engineering Design</b>	VL 2	<b>Mathematics III</b>	VL 2	<b>Fundamentals of Fluid Mechanics</b>	VL 2	<b>Heat and Mass Transfer</b>	VL 2	<b>Environmental Technology (part 2)</b>	PR 1							
8														I: Direct Current Networks and Electromagnetic Fields	Fundamentals of Mechanical Engineering Design	Analysis III	Fundamentals of Fluid Mechanics	Heat and Mass Transfer	Practical Exercise
9															Fundamentals of Mechanical Engineering Design	Analysis III	Fluid Mechanics for Process Engineering	Heat and Mass Transfer	Environmental Technology
10														Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Differential Equations 1		Heat and Mass Transfer	
11																Differential Equations 1			<b>Particle Technology and Solids Process Engineering</b>
12																Differential Equations 1			Particle Technology I
13	<b>Mathematics I</b>	VL 2	<b>Technical Thermodynamics I</b>	VL 2	<b>Mechanics III (Hydrostatics, Kinematics, Kinetics I)</b>	VL 3	<b>Electrical Machines</b>	VL 3	<b>Thermal Separation Processes</b>	VL 2	<b>Environmental Technology</b>	VL 2							
14														Linear Algebra I	Technical Thermodynamics I	Mechanics III	Electrical Machines	Thermal Separation Processes	Environmental Technology
15														Linear Algebra I	Technical Thermodynamics I	Mechanics III	Electrical Machines	Thermal Separation Processes	Environmental Assessment
16														Linear Algebra I	Technical Thermodynamics I	Mechanics III		Thermal Separation Processes	Environmental Assessment
17														Analysis I	Technical Thermodynamics I	Mechanics III		Thermal Separation Processes	
18														Analysis I	Technical Thermodynamics I	Mechanics III		Separation Processes	<b>Process and Plant Engineering I</b>
19						Process and Plant Engineering I													
20			<b>Mechanics II: Mechanics of Materials</b>				Gas and Steam Power Plants	VL 2			<b>Bachelor Thesis</b>								
21	<b>Mechanics I (Statics)</b>	VL 2	Mechanics II	VL 2	<b>Computer Engineering</b>	VL 3	Renewable Energy	VL 2	<b>Gas and Steam Power Plants</b>	VL 3	Process and Plant Engineering I	HÜ 1							
22														Mechanics I	Mechanics II	Computer Engineering	Energy Systems and Energy Industry	Gas and Steam Power Plants	Process and Plant Engineering I
23														Mechanics I	Mechanics II	Computer Engineering	Power Industry	Gas and Steam Power Plants	Process and Plant Engineering I

24			
25			
26		<b>Mathematics II</b>	
27		Linear Algebra II	VL 2
28	<b>Programming in C</b>	Linear Algebra II	UE 1
	Programming in C	Linear Algebra II	HÜ 1
	Programming in C	Analysis II	VL 2
	Programming in C	Analysis II	HÜ 1
29	<b>Physics for Engineers (AIW)</b>	Analysis II	UE 1
30	Physics for Engineers		
	Physics for Engineers		
31			
32			
33			

**Mechanical Engineering: Design (part 1)**  
Embodiment Design and 3D-CAD VL 2  
Mechanical Design Project I PBL3

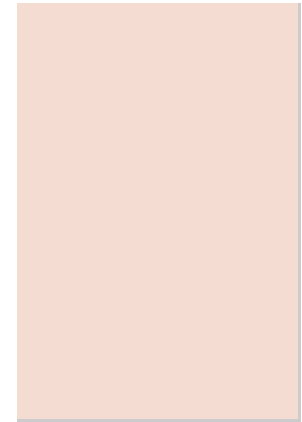
**Fundamentals of Materials Science (part 1)**  
Fundamentals of Materials Science I VL 2  
Physical and Chemical Basics of Materials Science VL 2

**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



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.