

# 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 Mechanical Engineering, Focus Biomechanics

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	Semester 2	Form	Semester 3	Form	Semester 4	Form	Semester 5	Form	Semester 6	Form	Semester 7	Form													
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	HÜ 1	Electrical Engineering II: Alternating Current Networks and Basic Devices	HÜ 1	Technical Thermodynamics II	HÜ 1	Team Project Design Methodology	UE 2	Introduction to Control Systems	UE 2	Management Tutorial	UE 2	
3															Chemistry II	HÜ 1	Electrical Engineering II: Alternating Current Networks and Basic Devices	UE 2	Technical Thermodynamics II	UE 1	Mechanical Design Project II	VL 2	Introduction to Control Systems	UE 2	Management Tutorial	UE 2	
4															Chemistry I	HÜ 1	Electrical Engineering II: Alternating Current Networks and Basic Devices	UE 2	Technical Thermodynamics II	UE 1	<b>Fundamentals of Materials Science (part 2)</b>	VL 2					
5															Chemistry II	HÜ 1	Electrical Engineering II: Alternating Current Networks and Basic Devices	UE 2	Technical Thermodynamics II	UE 1	Fundamentals of Materials Science II	VL 2					
6																					<b>Advanced Mechanical Engineering Design (part 2)</b>						
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>Advanced Mechanical Engineering Design (part 2)</b>	VL 2	<b>Computer Engineering</b>	VL 3	<b>MED II: Introduction to Physiology</b>	VL 2															
8															Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	HÜ 2	Analysis III	HÜ 1	Advanced Mechanical Engineering Design II	HÜ 2	Computer Engineering	UE 1	Introduction to Physiology	VL 2			
9															Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	UE 2	Fundamentals of Mechanical Engineering Design	HÜ 2	Analysis III	HÜ 1	Advanced Mechanical Engineering Design II	HÜ 2					
10															Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	UE 2	Fundamentals of Mechanical Engineering Design	HÜ 2	Differential Equations 1	UE 1	<b>Fluid Dynamics</b>						
11															Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	UE 2	Fundamentals of Mechanical Engineering Design	HÜ 2	Differential Equations 1	UE 1	Fluid Mechanics	VL 3			<b>BIO I: Experimental Methods in Biomechanics</b>	VL 2	
12															Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	UE 2	Fundamentals of Mechanical Engineering Design	HÜ 2	Differential Equations 1	HÜ 1	Fluid Mechanics	HÜ 2			Experimental Methods in Biomechanics	VL 2	
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>Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)</b>	VL 3	<b>Measurement Technology for Mechanical Engineers</b>	VL 2	<b>Fundamentals of Production and Quality Management</b>	VL 2															
14															Linear Algebra I	HÜ 1	Technical Thermodynamics I	HÜ 1	Mechanics III	VL 3	Mechanics IV	VL 3	Measurement Technology for Mechanical Engineers	VL 2	Production Process Organization	VL 2	
15															Linear Algebra I	UE 1	Technical Thermodynamics I	HÜ 1	Mechanics III	UE 2	Mechanics IV	UE 2	Measurement Technology for Mechanical Engineers	HÜ 1	Quality Management	VL 2	
16															Linear Algebra I	HÜ 1	Technical Thermodynamics I	HÜ 1	Mechanics III	HÜ 1	Mechanics IV	HÜ 1	Measurement Technology for Mechanical Engineers	HÜ 1	Quality Management	VL 2	
17															Analysis I	VL 2	Technical Thermodynamics I	UE 1	Mechanics III	UE 2	Mechanics IV	UE 2	Measurement Technology for Mechanical Engineers	HÜ 1	Quality Management	VL 2	
18															Analysis I	UE 1	Technical Thermodynamics I	UE 1	Mechanics III	HÜ 1	Mechanics IV	HÜ 1	Measurement Technology for Mechanical Engineers	HÜ 1	Quality Management	VL 2	
19			<b>Mechanics II: Mechanics of Materials</b>	VL 2	<b>Mechanical Engineering: Signals and Systems</b>	VL 2			<b>Numerical Mathematics I</b>	VL 2																	
20														Mechanics II	UE 2				Numerical Mathematics I	VL 2							
21														Mechanics II	UE 2					Numerical Mathematics I	UE 2						
22	<b>Mechanics I (Statics)</b>		Mechanics II	UE 2	<b>Mechanical Engineering: Signals and Systems</b>				Numerical Mathematics I	UE 2			<b>Bachelor Thesis</b>														

23	Mechanics I Mechanics I Mechanics I	VL 2 UE 2 HÜ 1	Mechanics II	HÜ 2	<b>Design (part 1)</b> Embodiment Design and 3D-CAD Mechanical Design Project I	VL 2 PBL3	Signals and Systems Signals and Systems	VL 3 UE 2	Mathematics I
24									
25									
26			<b>Mathematics II</b>						
27	<b>Programming in C</b> Programming in C Programming in C	VL 1 VL 1 PR 1	Linear Algebra II Linear Algebra II Linear Algebra II	VL 2 UE 1 HÜ 1	<b>Fundamentals of Materials Science (part 1)</b> Fundamentals of Materials Science I Physical and Chemical Basics of Materials Science	VL 2 VL 2	<b>MED I: Introduction to Anatomy</b> Introduction to Anatomy	VL 2 VL 2	<b>MED II: Introduction to Biochemistry and Molecular Biology</b> Introduction to Biochemistry and Molecular Biology
28			Analysis II	VL 2					
29			Analysis II	HÜ 1					
30	<b>Physics for Engineers (AIW)</b> Physics for Engineers Physics for Engineers	VL 2 UE 1	Analysis II	UE 1	<b>Advanced Mechanical Engineering Design (part 1)</b> Advanced Mechanical Engineering Design I Advanced Mechanical Engineering Design I	VL 2 HÜ 2	<b>MED I: Introduction to Radiology and Radiation Therapy</b> Introduction to Radiology and Radiation Therapy	VL 2 VL 2	<b>BIO I: Implants and Fracture Healing</b> Implants and Fracture Healing
31									
32									

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.