

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

Sample course plan C 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>Computer Engineering</b>	VL 3	<b>Foundations of Management</b>	VL 3	<b>Advanced Internship 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	PBL2	Computer Engineering	UE 1	Introduction to Management	HÜ 2
3															Chemistry II	HÜ 1	Electrical Engineering II: Alternating Current Networks and Basic Devices	HÜ 1	Technical Thermodynamics II	HÜ 1	Mechanical Design Project II	PBL3	Computer Engineering	UE 1	Management Tutorial	HÜ 2
4															Chemistry I	HÜ 1	Electrical Engineering II: Alternating Current Networks and Basic Devices	HÜ 1	Technical Thermodynamics II	HÜ 1						
5															Chemistry II	HÜ 1	Electrical Engineering II: Alternating Current Networks and Basic Devices	HÜ 1	Technical Thermodynamics II	HÜ 1	<b>Fundamentals of Materials Science (part 2)</b>					
6																	Electrical Engineering II: Alternating Current Networks and Basic Devices	UE 2	Technical Thermodynamics II	UE 1	Fundamentals of Materials Science II	VL 2				
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>Introduction to Control Systems</b>	VL 2	<b>MED II: Introduction to Physiology</b>	VL 2														
8														Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	HÜ 2	Fundamentals of Mechanical Engineering Design	HÜ 2	Analysis III	UE 1	Advanced Mechanical Engineering Design II	HÜ 2	Introduction to Control Systems	UE 2	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	Introduction to Control Systems	UE 2			
10														Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	UE 2	Fundamentals of Mechanical Engineering Design	HÜ 2	Differential Equations 1	VL 2	<b>Fluid Dynamics</b>				<b>BIO I: Experimental Methods in Biomechanics</b>	VL 2	
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					Experimental Methods in Biomechanics
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					
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 and Process Engineers</b>	VL 2	<b>Advanced Materials</b>	VL 2														
14														Linear Algebra I	UE 1	Technical Thermodynamics I	HÜ 1	Mechanics III	UE 2	Mechanics IV	VL 3	Measurement Technology for Mechanical and Process Engineers	VL 2	Advanced Materials Characterization	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 and Process Engineers	HÜ 1	Advanced Materials Design	VL 2	
16														Linear Algebra I	HÜ 1	Technical Thermodynamics I	HÜ 1	Mechanics III	HÜ 1	Mechanics IV	UE 2	Measurement Technology for Mechanical and Process Engineers	HÜ 1	Advanced Materials Design	HÜ 2	
17														Linear Algebra I	HÜ 1	Technical Thermodynamics I	HÜ 1	Mechanics III	HÜ 1	Mechanics IV	HÜ 1	Measurement Technology for Mechanical and Process Engineers	HÜ 1			
18														Analysis I	VL 2	Technical Thermodynamics I	UE 1	Mechanics III	HÜ 1	Mechanics IV	HÜ 1	Measurement Technology for Mechanical and Process Engineers	HÜ 1			
19	Analysis I	UE 1	Technical Thermodynamics I	UE 1	Mechanics III	HÜ 1	Mechanics IV	HÜ 1	Practical Course: Measurement and Control Systems	PR 2																
20	Analysis I	HÜ 1	Technical Thermodynamics I	HÜ 1	Mechanics III	HÜ 1	Mechanics IV	HÜ 1																		
21	<b>Mechanics I (Statics)</b>	VL 2	<b>Mechanics II: Mechanics of Materials</b>	VL 2	<b>Mechanical Engineering:</b>		<b>Signals and Systems</b>	I	<b>Numerical Mathematics I</b>	VL 2			<b>Bachelor Thesis</b>													
22														Mechanics I (Statics)	Mechanics II	Mechanical Engineering:	Signals and Systems	Numerical Mathematics I								

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