

# Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w16)

Sample course plan A 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/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>Computer Engineering</b>	VL 3	<b>Foundations of Management</b>	VL 3	<b>Advanced Internship GES</b>								
2															Chemistry I	Technical Thermodynamics II	Team Project Design Methodology	Computer Engineering	Introduction to Management		
3															Chemistry II	Technical Thermodynamics II	Mechanical Design Project II	Computer Engineering	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>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	<b>BIO I: Experimental Methods in Biomechanics</b>	VL 2							
8															Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	Fundamentals of Mechanical Engineering Design	Analysis III	Advanced Mechanical Engineering Design II	Introduction to Control Systems	Introduction to Physiology	
9																Fundamentals of Mechanical Engineering Design	Analysis III	Advanced Mechanical Engineering Design II	Introduction to Control Systems		
10																	Differential Equations 1				
11																	Differential Equations 1				
12																	Differential Equations 1				
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>Electrical Machines</b>	VL 3									
14															Linear Algebra I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Electrical Machines	
15															Linear Algebra I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Electrical Machines	
16															Linear Algebra I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers		
17															Analysis I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers		
18															Analysis I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers		
19	<b>Mechanics I (Statics)</b>	VL 2	<b>Mechanics II: Mechanics of Materials</b>	VL 2	<b>Mechanical Engineering: Design (part 1)</b>	VL 2	<b>Signals and Systems</b>	VL 3	<b>Numerical Mathematics I</b>	VL 2			<b>Bachelor Thesis</b>								
20																					
21																					
22	Mechanics I		Mechanics II		Embodiment Design and		Signals and Systems		Numerical Mathematics I												
23	Mechanics I		Mechanics II				Signals and Systems		Numerical Mathematics I												

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