

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

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/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	Chemistry	VL 2	Electrical Engineering II: Alternating Current Networks and Basic Devices	VL 3	Technical Thermodynamics II	VL 2	Mechanical Engineering: Design (part 2)	PBL2	Computer Engineering	VL 3	Foundations of Management	VL 3	Advanced Internship GES												
2															Chemistry I	VL 2	Technical Thermodynamics II	VL 2	Team Project Design Methodology	TT 3	Computer Engineering	UE 1	Introduction to Management	HÜ 2	
3															Chemistry II	VL 2	Technical Thermodynamics II	HÜ 1	Mechanical Design Project II		Computer Engineering	UE 1	Management Tutorial		
4															Chemistry I	HÜ 1	Electrical Engineering II: Alternating Current Networks and Basic Devices	UE 2	Technical Thermodynamics II	UE 1	Fundamentals of Materials Science (part 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																									
7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	VL 3	Fundamentals of Mechanical Engineering Design	VL 2	Mathematics III	VL 2	Advanced Mechanical Engineering Design (part 2)	VL 2	Introduction to Control Systems	VL 2	MED II: Introduction to Physiology	VL 2													
8														Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	HÜ 2	Analysis III	UE 1	Advanced Mechanical Engineering Design II	HÜ 2	Introduction to Control Systems	UE 2	Introduction to Physiology			
9														Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	UE 2	Fundamentals of Mechanical Engineering Design	HÜ 2	Differential Equations 1	VL 2	Fluid Dynamics					
10														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			BIO I: Experimental Methods in Biomechanics	
11														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
12																									
13	Mathematics I	VL 2	Technical Thermodynamics I	VL 2	Mechanics III (Hydrostatics, Kinematics, Kinetics I)	VL 3	Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)	VL 3	Measurement Technology for Mechanical and Process Engineers	VL 2	Fundamentals of Production and Quality Management	VL 2													
14														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	Production Process Organization	
15														Linear Algebra I	UE 1	Technical Thermodynamics I	HÜ 1	Mechanics III	HÜ 1	Mechanics IV	HÜ 1	Measurement Technology for Mechanical and Process Engineers	HÜ 1	Quality Management	
16														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		
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																									
20			Mechanics II: Mechanics of Materials						Numerical Mathematics I				Bachelor Thesis												
21	Mechanics I (Statics)	VL 2	Mechanics II	VL 2	Mechanical Engineering: Design (part 1)	VL 2	Signals and Systems	VL 3	Numerical Mathematics I	VL 2															
22			Mechanics I	UE 2					Mechanics II	HÜ 2	Embodiment Design and	VL 2		Signals and Systems	HÜ 1	Numerical Mathematics I	UE 2								
23			Mechanics I	UE 2					Mechanics II	HÜ 2	Embodiment Design and	VL 2		Signals and Systems	HÜ 1	Numerical Mathematics I	UE 2								

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