Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w18)

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

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