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

Sample course plan C Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))
Specialisation Mechanical Engineering, Focus Biomechanics

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				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							Mechanical Design Project II	PBL	3	Introduction to Control Systems	UE	2	Management Tutorial	UE	2			
	Chemistry I	HÜ	1	Electrical Engineering II: Alternating Current Networks and Basic Devices	VL	3	Technical Thermodynamics II	HÜ	1												
	Chemistry II	HÜ	1				Technical Thermodynamics II	UE	1												
4				Electrical Engineering II: Alternating Current Networks and Basic Devices	UE	2				**Fundamentals of Materials Science (part 2)**											
5										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							Analysis III	VL	2	Advanced Mechanical Engineering Design II	HÜ	2	Computer Engineering	VL	3						
	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	VL	3	Fundamentals of Mechanical Engineering Design	VL	2	Analysis III	UE	1				Computer Engineering	UE	1	Introduction to Physiology	VL	2			
							Analysis III	HÜ	1	**Fluid Dynamics**											
9				Fundamentals of Mechanical Engineering Design	HÜ	2	Differential Equations 1	VL	2	Fluid Mechanics	VL	3									
10	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	UE	2				Differential Equations 1	UE	1	Fluid Mechanics	HÜ	2				**BIO I: Experimental Methods in Biomechanics**					
11							Differential Equations 1	HÜ	1							Experimental Methods in Biomechanics	VL	2			
12																					
13	**Mathematics I**			**Technical Thermodynamics I**									**Measurement Technology for Mechanical Engineers**			**Advanced Materials**					
14	Linear Algebra I	VL	2										Measurement Technology for Mechanical Engineering	VL	2	Advanced Materials Characterization	VL	2			
15	Linear Algebra I	UE	1	Technical Thermodynamics I	VL	2	**Mechanics III (Hydrostatics, Kinematics, Kinetics I)**			**Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)**						Advanced Materials Design	VL	2			
16	Linear Algebra I	HÜ	1	Technical Thermodynamics I	HÜ	1	Mechanics III	VL	3	Mechanics IV	VL	3	Measurement Technology for Mechanical Engineering	HÜ	1	Advanced Materials Design	HÜ	2			
17	Analysis I	VL	2	Technical Thermodynamics I	UE	1	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													Numerical Mathematics I	VL	2						
21				Mechanics II	VL	2	**Mechanical Engineering:**			**Signals and Systems**			Numerical	UE	2						
22	**Mechanics I (Statics)**			Mechanics II	UE	2															

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