Course of Study General Engineering Science (German program) (Study Cohort w14)

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

Legend:

Core qualification Compulsory Specialisation Compulsory Focus Compulsory Thesis Compulsory

Core qualification Elective Specialisation Elective Focus Elective Compulsory Interdisciplinary complement

Compulsory Compulsory

LP	Semester 1	FormHrs/wk	Semester 2 For	rmHrs/wk	Semester 3	FormHrs/wk	Semester 4	FormHrs/wk	Semester 5	FormHrs/wk	Semester 6	FormHrs/wk
1	Physics for Engineers (part 1)		Electrical Engineering II: Alternating Cur	rrent	Technical Thermodynamics II		Mechanical Engineering: Design (pa	art 2)	Introduction to Control Systems		Foundations of Management	
2	Physics for Engineers	VL 2	Networks and Basic Devices		Technical Thermodynamics II	VL 2	Team Project Design Methodology	POL 2	Introduction to Control Systems	VL 2	Introduction to Management	VL 4
3	Physics for Engineers	UE 1	Electrical Engineering II: Alternating VI	L 3	Technical Thermodynamics II	HÜ 1	Mechanical Design Project II	TT 3	Introduction to Control Systems	UE 2	Project Entrepreneurship	POL 2
			Current Networks and Basic Devices Electrical Engineering II: Alternating UE	F 2	Technical Thermodynamics II	UE 1						
4			Current Networks and Basic Devices	C 2			Fundamentals of Materials Science	<u>" / </u>				
5	Chemistry						Fundamentals of Materials Science	II VL 2				
6	Chemistry I	VL 2					Signals and Systems					
7	Chemistry II	VL 2 HÜ 1	Fundamentals of Mechanical Engineering	ıq	Computer Engineering		Signals and Systems	VL 3	Measurement Technology for Mecha	nical and	BIO I: Implants and Testing (part 2)	
8	Chemistry II	HÜ 1	Design	ŭ	Computer Engineering	VL 3	Signals and Systems	HÜ 1	Process Engineers		Experimental Methods in	2
_	- Onemistry ii	110 1	Fundamentals of Mechanical VI	L 2	Computer Engineering	UE 1			Measurement Technology for	VL 2	Biomechanics	
9			Engineering Design						Mechanical and Process Engineers			
10				Ü 2					Measurement Technology for	HÜ 1	MED II: Medical Basics II (part 2)	
11	Electrical Engineering I: Direct Curr	ent	Engineering Design						Mechanical and Process Engineers Practical Course: Measurement and	DD 2	Introduction to Physiology	VL 2
12	Networks and Electromagnetic Field	s					Fluid Dynamics		Control Systems	111 2		
	Electrical Engineering I: Direct Currer						Fluid Mechanics	VL 3				
13	Networks and Electromagnetic Fields		Technical Thermodynamics I		Mathematics III	VL 2	Fluid Mechanics	HÜ 1	BIO I: Implants and Testing (part 1)	VL 2	Bachelor Thesis	
14	Electrical Engineering I: Direct Currer Networks and Electromagnetic Fields		· ·	'L 2 Ü 1	Analysis III Analysis III	VL 2 UE 1			Implants and Fracture Healing	VL 2		
15	Networks and Liectioniagnetic Fields	•	· ·	E 1	Analysis III	HÜ 1						
16					Differential Equations 1	VL 2			MED II: Medical Basics II (part 1)			
17	Mathematics I				Differential Equations 1	UE 1			Introduction to Biochemistry and	VL 2		
	Linear Algebra I	VL 2			Differential Equations 1	HÜ 1			Molecular Biology			
18	Linear Algebra I	UE 1					Mechanics IV (Kinetics II, Oscillation					
19	Linear Algebra I	HÜ 1	Mechanics II: Mechanics of Materials				Analytical Mechanics, Multibody Sy Mechanics IV	VL 3	Numerical Mathematics I			
20	Analysis I	VL 2		L 2			Mechanics IV	UE 2	Numerical Mathematics I	VL 2		
21	Analysis I	UE 1	Mechanics II UE	E 2	Mechanics III (Hydrostatics, Kinema	ntics	Mechanics IV	HÜ 1	Numerical Mathematics I	UE 2		
	Analysis I	HÜ 1			Kinetics I)	,						
22					Mechanics III	VL 3						
23					Mechanics III	UE 2						
24					Mechanics III	HÜ 1	MED I: Medical Basics I					
25	Mechanics I (Statics)		Mathematics II				Introduction to Radiology and	VL 2	Heat Transfer			
26	Mechanics I	VL 2	Linear Algebra II VI	L 2			Radiation Therapy	\/I = 0	Heat Transfer	VL 3		
_	Mechanics I	UE 2	Linear Algebra II UE	E 1			Introduction to Anatomy	VL 2	Heat Transfer	HÜ 1		
27	Mechanics I	HÜ 1	ŭ .	Ü 1	Mechanical Engineering: Design (pa							
28				L 2	Embodiment Design and 3D-CAD Mechanical Design Project I	VL 2 TT 3						
29				Ü 1	wechanical Design Floject i	11 3						
30			Analysis II UE	E 1	Fundamentals of Materials Science	(part 1)	Advanced Materials					
					Fundamentals of Materials Science		Advanced Materials Characterization	n VL 2				
31					Physical and Chemical Basics of	VL 2	Advanced Materials Design	VL 2				
32					Materials Science		Advanced Materials Design	HÜ 2				
33			Programming in C									
34			Programming in C VI	L 1								
-	I		December in C	n 4								

	Programming in C	PH	1
35	Physics for Engineers (part 2)		
36	Physics-Lab for ET/IIW-Engineers	PR	1

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.