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

Sample course plan - Bachelor General Engineering Science (English program) (GESBS) Specialisation Biomedical Engineering

Legend:

Core qualification Compulsory

Core qualification Elective

Compulsory

Focus Compulsory

Interdisciplinary complement

LP	Semester 1	FormHrs/wk	Semester 2 FormHrs/	wk Semester 3	FormHrs/w	k Semester 4 Form	Hrs/wk	Semester 5 FormHrs/v	vk Semester 6	FormHrs/wk
1	Chemistry (GES)		Physics for Engineers (GES) (part 2)	Technical Thermodynamics II		Fundamentals of Materials Science (part 2))	Introduction to Control Systems	Foundations of Management	
2	Chemistry I	VL 2	Physics-Lab for ET/IIW-Engineers PR 1	Technical Thermodynamics II	VL 2	Fundamentals of Materials Science II VL	2	Introduction to Control Systems VL 2	Introduction to Management	VL 4
3	· ·	VL 2	Fundamentals of Mechanical Engineering	Technical Thermodynamics II	HÜ 1	Introduction into Medical Technology and		Introduction to Control Systems UE 2	Project Entrepreneurship	POL 2
		HÜ 1	Design	Technical Thermodynamics II	UE 1	Systems				
4	Chemistry II	HÜ 1	Fundamentals of Mechanical VL 2			Introduction into Medical Technology VL	2			
5			Engineering Design			and Systems				
6			Fundamentals of Mechanical HÜ 2			Introduction into Medical Technology POL	4			
7	Linear Algebra		Engineering Design	Computer Engineering		and Systems		Mechanical Engineering: Design (part 1)	Mechanical Engineering: Design (p	art 2)
8	Linear Algebra	VL 4		Computer Engineering	VL 3			Embodiment Design and 3D-CAD VL 2	Team Project Design Methodology	POL 2
	Linear Algebra	HÜ 2		Computer Engineering	UE 1			Mechanical Design Project I TT 3	Mechanical Design Project II	TT 3
9	Linear Algebra	UE 2	Technical Thermodynamics I Technical Thermodynamics I VL 2			MED I: Medical Basics I Introduction to Radiology and VL				
10			Technical Thermodynamics I HÜ 1			Radiation Therapy	2	BIO I: Implants and Testing (part 1)	BIO I: Implants and Testing (part 2)	
11			Technical Thermodynamics I UE 1			Introduction to Anatomy VL	2	Implants and Fracture Healing VL 2	Experimental Methods in Biomechanics	2
12									Diomechanics	
13				Mathematics III				MED II: Medical Basics II (part 1)	MED II: Medical Basics II (part 2)	
14				Analysis III	VL 2			Introduction to Biochemistry and VL 2	Introduction to Physiology	VL 2
				Analysis III	UE 1			Molecular Biology		
15	Electrical Engineering I	VL 3	Mathematical Analysis	Analysis III	HÜ 1	Signals and Systems Signals and Systems VL				
16	o o	UE 2	Mathematical Analysis VL 4 Mathematical Analysis HÜ 2	Differential Equations 1	VL 2	Signals and Systems VL Signals and Systems HÜ		Numerical Mathematics I	Bachelor Thesis	
17	Electrical Engineering I	OL Z	Mathematical Analysis UE 2	Differential Equations 1 Differential Equations 1	UE 1 HÜ 1	organis and dystems		Numerical Mathematics I VL 2		
18			•	Differential Equations 1	по т			Numerical Mathematics I UE 2		
19										
20										
21	Mechanics I (GES)			Mechanics III (GES)		Fluid Dynamics				
22		VL 2		Mechanics III	HÜ 1	Fluid Mechanics VL		Heat Transfer		
23	Mechanics I	HÜ 3	Electrical Engineering II	Mechanics III Mechanics III	UE 2 VL 3	Fluid Mechanics HÜ	1	Heat Transfer VL 3		
24			Electrical Engineering II VL 3	Weethanies in	VL 0			Heat Transfer HÜ 1		
25			Electrical Engineering II UE 2							
26										
27	Physics for Engineers (GES) (part 1)			Fundamentals of Materials Science	(part 1)	Mechanics IV (Kinetics II, Oscillations,				
28		VL 2		Fundamentals of Materials Science	<u> </u>	Analytical Mechanics, Multibody Systems))	Measurement Technology for Mechanical and		
	Physics for Engineers	UE 1		Physical and Chemical Basics of	VL 2	Mechanics IV VL		Process Engineers		
29			Mechanics II (GES)	Materials Science		Mechanics IV UE		Measurement Technology for VL 2		
30			Mechanics II VL 2 Mechanics II HÜ 2			Mechanics IV HÜ	1	Mechanical and Process Engineers		
31			no Z					Measurement Technology for HÜ 1		
32	1							Mechanical and Process Engineers Practical Course: Measurement and PR 2		
33								Control Systems		
34										

35	Programming in C		
36	Programming in C	VL	1
	Programming in C	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.