Course of Study General Engineering Science (English program, 7 semester) (Study Cohort w17)

Sample course plan A Bachelor General Engineering Science (English program, 7 semester) (GESBS(7))
Specialisation Biomedical Engineering

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 (GES)**			**Technical Thermodynamics I**			**Technical Thermodynamics II**			**Fundamentals of Materials Science (part 2)**			**Introduction to Control Systems**			**Foundations of Management**			**Advanced Internship AIW/ GES**		
2	Chemistry I	VL	2							Fundamentals of Materials Science II	VL	2	Introduction to Control Systems	VL	2	Introduction to Management	VL	3			
	Chemistry II	VL	2	Technical Thermodynamics I	VL	2	Technical Thermodynamics II	VL	2												
	Chemistry I	HÜ	1	Technical Thermodynamics I	HÜ	1	Technical Thermodynamics II	HÜ	1				Introduction to Control Systems	UE	2	Management Tutorial	HÜ	2			
3	Chemistry II	HÜ	1	Technical Thermodynamics I	UE	1	Technical Thermodynamics II	UE	1	**Signals and Systems**											
4										Signals and Systems	VL	3									
5										Signals and Systems	UE	2									
6																					
7	**Linear Algebra**			**Mathematical Analysis**			**Mathematics III**						**Mechanical Engineering: Design (part 1)**			**Mechanical Engineering: Design (part 2)**					
8	Linear Algebra	VL	4	Mathematical Analysis	VL	4	Analysis III	VL	2				Embodiment Design and 3D-CAD	VL	2	Team Project Design Methodology	PBL2				
9	Linear Algebra	HÜ	2	Mathematical Analysis	HÜ	2	Analysis III	UE	1	**Fluid Dynamics**											
	Linear Algebra	UE	2	Mathematical Analysis	UE	2	Analysis III	HÜ	1	Fluid Mechanics	VL	3	Mechanical Design Project I	PBL3		Mechanical Design Project II	PBL3				
							Differential Equations 1	VL	2	Fluid Mechanics	HÜ	2									
10							Differential Equations 1	UE	1				**Numerical Mathematics I**			**Introduction into Medical Technology and Systems**					
11							Differential Equations 1	HÜ	1				Numerical Mathematics I	VL	2	Introduction into Medical Technology and Systems	VL	2			
12																					
13													Numerical Mathematics I	UE	2	Introduction into Medical Technology and Systems	PS	2			
14																					
15	**Electrical Engineering I**			**Electrical Engineering II**			**Mechanics III (GES)**			**Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)**						Introduction into Medical Technology and Systems	HÜ	1			
	Electrical Engineering I	VL	3	Electrical Engineering II	VL	3	Mechanics III	HÜ	1												
							Mechanics III	UE	2	Mechanics IV	VL	3									
	Electrical Engineering I	UE	2	Electrical Engineering II	UE	2	Mechanics III	VL	3	Mechanics IV	UE	2									
16										Mechanics IV	HÜ	1	**Heat Transfer**			**MED II: Introduction to Physiology**					
17													Heat Transfer	VL	3	Introduction to Physiology	VL	2			
18													Heat Transfer	HÜ	2						
19																**BIO I: Experimental Methods in Biomechanics**			**Bachelor Thesis**		
20																					
21	**Mechanics I (GES)**			**Mechanics II (GES)**			**Computer Engineering**			**MED I: Introduction to Anatomy**						Experimental Methods in Biomechanics	VL	2			
	Mechanics I	VL	2	Mechanics II	VL	2	Computer Engineering	VL	3	Introduction to Anatomy	VL	2									
22	Mechanics I	HÜ	3	Mechanics II	HÜ	2	Computer Engineering	UE	1				**Measurement Technology for Mechanical and Process Engineers**								
23																					
24										**MED I: Introduction to Radiology and Radiation Therapy**			Measurement Technology for	VL	2						
25																					
26																					

				Introduction to Radiology and Radiation Therapy VL 2	Mechanical and Process Engineers

Top-right green cell continuation:
- Mechanical and Process Engineers
- Measurement Technology for Mechanical and Process Engineers HÜ 1
- Practical Course: Measurement and Control Systems PR 2

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Programming in C
Programming in C   VL 1
Programming in C   PR 1

Fundamentals of Mechanical Engineering (GES)
Fundamentals of Mechanical Engineering   VL 2
Fundamentals of Mechanical Engineering   UE 2

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

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Physics for Engineers (GES)
Physics for Engineers   VL 2
Physics for Engineers   UE 1

BIO I: Implants and Fracture Healing
Implants and Fracture Healing   VL 2

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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.