Course of Study General Engineering Science (English program, 7 semester) (Study Cohort w19)

Legend:

Core qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
Core qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

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

LP	Semester 1	FormHrs/wk	Semester 2	FormHrs/wk	Semester 3	FormHrs/wk	Semester 4	FormHrs/wk	Semester 5	FormHrs/wk	Semester 6	FormHrs/wk	Semester 7	FormHrs/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/ ES**	
2	Chemistry I	VL 2	Technical Thermodynamics I	VL 2	Technical Thermodynamics II	VL 2	Fundamentals of Materials Science II	VL 2	Introduction to Control Systems	VL 2	Introduction to Management	VL 3	Advanced Internship AIW/ ES: Preparation	SE 1
3	Chemistry II	VL 2	Technical Thermodynamics I	HÜ 1	Technical Thermodynamics II	HÜ 1	**Signals and Systems**		Introduction to Control Systems	GÜ 2	Management Tutorial	GÜ 2	Advanced Intenship AIW/ ES: Internship-accompanying Seminar	SE 1
4	Chemistry I	HÜ 1	Technical Thermodynamics I	GÜ 1	Technical Thermodynamics II	GÜ 1	Signals and Systems	VL 3						
5	Chemistry II	HÜ 1					Signals and Systems	GÜ 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	PBL 2		
9	Linear Algebra	HÜ 2	Mathematical Analysis	HÜ 2	Analysis III	GÜ 1	**Fluid Dynamics**		Mechanical Design Project I	PBL 3	Mechanical Design Project II	PBL 3		
10	Linear Algebra	GÜ 2	Mathematical Analysis	GÜ 2	Analysis III	HÜ 1	Fluid Mechanics	VL 3						
11					Differential Equations 1	VL 2	Fluid Mechanics	HÜ 2	**Numerical Mathematics I**		**Introduction into Medical Technology and Systems**			
12					Differential Equations 1	GÜ 1			Numerical Mathematics I	VL 2	Introduction into Medical Technology and Systems	VL 2		
13					Differential Equations 1	HÜ 1			Numerical Mathematics I	GÜ 2	Introduction into Medical Technology and Systems	PS 2		
14											Introduction into Medical Technology and Systems	HÜ 1		
15	**Electrical Engineering I**		**Electrical Engineering II**		**Engineering Mechanics III (GES)**		**Mechanics IV (Oscillations, Analytical Mechanics, Multibody Systems, Numerical Mechanics)**							
16	Electrical Engineering I	VL 3	Electrical Engineering II	VL 3	Mechanics III	HÜ 1	Mechanics IV	VL 3	**Heat Transfer**		**MED II: Introduction to Physiology**			
17	Electrical Engineering I	GÜ 2	Electrical Engineering II	GÜ 2	Mechanics III	GÜ 2	Mechanics IV	GÜ 2	Heat Transfer	VL 3	Introduction to Physiology	VL 2		
18					Mechanics III	VL 3	Mechanics IV	HÜ 1	Heat Transfer	HÜ 2				
19											**BIO I: Experimental Methods in Biomechanics**		**Bachelor Thesis**	
20											Experimental Methods in Biomechanics	VL 2		
21	**Mechanics I (GES)**		**Mechanics II (GES)**		**Computer Engineering**		**MED I: Introduction to Anatomy**							
22	Mechanics I	VL 2	Mechanics II	VL 2	Computer Engineering	VL 3	Introduction to Anatomy	VL 2	**Measurement Technology for Mechanical Engineers**					
23	Mechanics I	HÜ 3	Mechanics II	HÜ 2	Computer Engineering	GÜ 1			Measurement Technology for Mechanical Engineering	VL 2				
24							**MED I: Introduction to Radiology and Radiation Therapy**		Measurement Technology for Mechanical Engineering	HÜ 1				
25							Introduction to Radiology and Radiation Therapy	VL 2	Practical Course: Measurement and Control Systems	PR 2				
26														
27	**Programming in C**		**Fundamentals of Mechanical Engineering Design (GES)**		**Fundamentals of Materials Science (part 1)**				**MED II: Introduction to Biochemistry and Molecular Biology**					
28	Programming in C	VL 1	Fundamentals of Mechanical Engineering	VL 2	Fundamentals of Materials Science I	VL 2			Introduction to Biochemistry and Molecular Biology	VL 2				
29	**Physics for Engineers (GES)**		Fundamentals of Mechanical Engineering	GÜ 2	Physical and Chemical Basics of Materials Science	VL 2			**BIO I: Implants and Fracture Healing**					
30	Physics for Engineers	VL 2							Implants and Fracture Healing	VL 2				
31	Physics for Engineers	GÜ 1												
32														
33														
	Non-technical 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.