Course of Study General Engineering Science (English program, 7 semester) (Study Cohort w16)

Sample course plan C Bachelor General Engineering Science (English program, 7 semester) (GESBS(7))
Specialisation Mechanical Engineering, Focus Mechatronics

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 2 3	**Chemistry (GES)**			**Fundamentals of Mechanical Engineering Design**			**Technical Thermodynamics II**			**Mechanical Engineering: Design (part 2)**			**Computer Engineering**			**Foundations of Management**			**Advanced Internship GES**		
	Chemistry I	VL	2	Fundamentals of Mechanical Engineering Design	VL	2	Technical Thermodynamics II	VL	2	Team Project Design Methodology	PBL	2	Computer Engineering	VL	3	Introduction to Management	VL	3			
	Chemistry II	VL	2				Technical Thermodynamics II	HÜ	1	Mechanical Design Project II	TT	3	Computer Engineering	UE	1	Management Tutorial	HÜ	2			
	Chemistry I	HÜ	1	Fundamentals of Mechanical Engineering Design	HÜ	2	Technical Thermodynamics II	UE	1												
4 5	Chemistry II	HÜ	1							**Fundamentals of Materials Science (part 2)**											
										Fundamentals of Materials Science II	VL	2									
6										**Advanced Mechanical Engineering Design (part 2)**											
7 8	**Linear Algebra**			**Technical Thermodynamics I**			**Mathematics III**			Advanced Mechanical Engineering Design II	VL	2	**Introduction to Control Systems**			**Semiconductor Circuit Design**					
	Linear Algebra	VL	4	Technical Thermodynamics I	VL	2	Analysis III	VL	2	Advanced Mechanical Engineering Design II	HÜ	2	Introduction to Control Systems	VL	2	Semiconductor Circuit Design	VL	3			
	Linear Algebra	HÜ	2	Technical Thermodynamics I	HÜ	1	Analysis III	UE	1				Introduction to Control Systems	UE	2	Semiconductor Circuit Design	UE	1			
	Linear Algebra	UE	2	Technical Thermodynamics I	UE	1	Analysis III	HÜ	1	**Fluid Dynamics**											
9 10 11 12							Differential Equations 1	VL	2	Fluid Mechanics	VL	3									
							Differential Equations 1	UE	1	Fluid Mechanics	HÜ	2									
							Differential Equations 1	HÜ	1												
13 14				**Mathematical Analysis**						**Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)**			**Measurement Technology for Mechanical and Process Engineers**			**Mathematics IV**					
				Mathematical Analysis	VL	4										Complex Functions	VL	2			
15 16 17 18	**Electrical Engineering I**			Mathematical Analysis	HÜ	2	**Mechanics III (GES)**						Measurement Technology for Mechanical and Process Engineers	VL	2	Complex Functions	UE	1			
	Electrical Engineering I	VL	3	Mathematical Analysis	UE	2	Mechanics III	HÜ	1	Mechanics IV	VL	3				Complex Functions	HÜ	1			
	Electrical Engineering I	UE	2				Mechanics III	UE	2	Mechanics IV	UE	2	Measurement Technology for Mechanical and Process Engineers	HÜ	1	Differential Equations 2	VL	2			
							Mechanics III	VL	3	Mechanics IV	HÜ	1				Differential Equations 2	UE	1			
													Practical Course: Measurement and Control Systems	PR	2	Differential Equations 2	HÜ	1			
19 20													**Electrical Engineering III: Circuit Theory and Transients**			**Advanced Materials**			**Bachelor Thesis**		
21 22 23	**Mechanics I (GES)**			**Electrical Engineering II**			**Mechanical Engineering: Design (part 1)**			**Signals and Systems**						Advanced Materials Characterization	VL	2			
	Mechanics I	VL	2	Electrical Engineering II	VL	3	Embodiment Design and 3D-CAD	VL	2	Signals and Systems	VL	3	Circuit Theory	VL	3	Advanced Materials Design	VL	2			
	Mechanics I	HÜ	3	Electrical Engineering II	UE	2				Signals and Systems	HÜ	1	Circuit Theory	UE	2	Advanced Materials Design	HÜ	2			
							Mechanical Design	TT	3												

			Project I			
24			**Fundamentals of Materials Science (part 1)**			
25			Fundamentals of Materials Science I VL 2		**Simulation and Design of Mechatronic Systems**	
26						
27	**Programming in C**	**Mechanics II (GES)**	Physical and Chemical VL 2 Basics of Materials Science		Simulation and Design VL 2 of Mechatronic Systems	
	Programming in C VL 1	Mechanics II VL 2			Simulation and Design HÜ 1 of Mechatronic Systems	
	Programming in C PR 1	Mechanics II HÜ 2	**Advanced Mechanical Engineering Design (part 1)**		Simulation and Design PR 1 of Mechatronic Systems	
28						
29	**Physics for Engineers (GES)**		Advanced Mechanical VL 2 Engineering Design I			
30	Physics for Engineers VL 2					
	Physics for Engineers UE 1		Advanced Mechanical HÜ 2 Engineering Design I			
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.