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

Sample course plan A Bachelor General Engineering Science (English program, 7 semester) (GESBS(7))
Specialisation Mechanical Engineering, Focus Aircraft Systems 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)**			**Fundamentals of Mechanical Engineering Design**			**Technical Thermodynamics II**			**Mechanical Engineering: Design (part 2)**			**Computer Engineering**			**Foundations of Management**			**Advanced Internship GES**		
2	Chemistry I	VL	2							Team Project Design Methodology	PBL	2	Computer Engineering	VL	3	Introduction to Management	VL	3			
3	Chemistry II	VL	2	Fundamentals of Mechanical Engineering Design	VL	2	Technical Thermodynamics II	VL	2				Computer Engineering	UE	1						
	Chemistry I	HÜ	1				Technical Thermodynamics II	HÜ	1	Mechanical Design Project II	TT	3				Management Tutorial	HÜ	2			
	Chemistry II	HÜ	1	Fundamentals of Mechanical Engineering Design	HÜ	2	Technical Thermodynamics II	UE	1												
4										**Fundamentals of Materials Science (part 2)**											
5										Fundamentals of Materials Science II	VL	2									
6																					
7	**Linear Algebra**			**Technical Thermodynamics I**			**Mathematics III**			**Advanced Mechanical Engineering Design (part 2)**			**Introduction to Control Systems**			**Integrated Product Development and Lightweight Design**					
8	Linear Algebra	VL	4	Technical Thermodynamics I	VL	2	Analysis III	VL	2	Advanced Mechanical Engineering Design II	VL	2	Introduction to Control Systems	VL	2						
	Linear Algebra	HÜ	2				Analysis III	UE	1							Integrated Product Development I	VL	2			
	Linear Algebra	UE	2	Technical Thermodynamics I	HÜ	1	Analysis III	HÜ	1	Advanced Mechanical Engineering Design II	HÜ	2	Introduction to Control Systems	UE	2						
9				Technical Thermodynamics I	UE	1	Differential Equations 1	VL	2							Development of Lightweight Design Products	VL	2			
10							Differential Equations 1	UE	1	**Fluid Dynamics**											
11							Differential Equations 1	HÜ	1	Fluid Mechanics	VL	3									
12										Fluid Mechanics	HÜ	2				CAE-Team Project	PBL	2			
13				**Mathematical Analysis**																	
14				Mathematical Analysis	VL	4							**Measurement Technology for Mechanical and Process Engineers**			**Aeronautical Systems**					
15	**Electrical Engineering I**			Mathematical Analysis	HÜ	2	**Mechanics III (GES)**			**Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)**						Air Transportation Systems	VL	2			
16	Electrical Engineering I	VL	3	Mathematical Analysis	UE	2	Mechanics III	HÜ	1				Measurement Technology for Mechanical and Process Engineers	VL	2	Fundamentals of Aircraft Systems	VL	2			
17	Electrical Engineering I	UE	2				Mechanics III	UE	2	Mechanics IV	VL	3				Fundamentals of Aircraft Systems	UE	1			
18							Mechanics III	VL	3	Mechanics IV	UE	2	Measurement Technology for Mechanical and Process Engineers	HÜ	1	Air Transportation Systems	HÜ	1			
										Mechanics IV	HÜ	1	Practical Course: Measurement and Control Systems	PR	2						
19													**Advanced Mechanical Design Project**			**Electrical Machines**			**Bachelor Thesis**		
20																					
21	**Mechanics I (GES)**			**Electrical Engineering II**			**Mechanical Engineering: Design (part 1)**			**Signals and Systems**			Advanced Mechanical Design Project	PBL	4	Electrical Machines	VL	3			
22	Mechanics I	VL	2	Electrical Engineering II	VL	3	Embodiment Design and 3D-CAD	VL	2	Signals and Systems	VL	3				Electrical Machines	HÜ	2			
23	Mechanics I	HÜ	3	Electrical Engineering II	UE	2				Signals and Systems	HÜ	1									
							Mechanical Design	TT	3												

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