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

Sample course plan C Bachelor General Engineering Science (English program) (GESBS)
Specialisation Mechanical Engineering, Focus Product Development and Production

Legend:

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

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
1	**Chemistry (GES)**			**Physics for Engineers (GES) (part 2)**			**Technical Thermodynamics II**			**Mechanical Engineering: Design (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	Team Project Design Methodology	POL	2	Introduction to Control Systems	VL	2	Introduction to Management	VL	4
3	Chemistry II	VL	2	**Fundamentals of Mechanical Engineering**			Technical Thermodynamics II	HÜ	1	Mechanical Design Project II	TT	3	Introduction to Control Systems	UE	2	Project Entrepreneurship	POL	2
4	Chemistry I	HÜ	1	**Design**			Technical Thermodynamics II	UE	1									
5	Chemistry II	HÜ	1	Fundamentals of Mechanical	VL	2				**Fundamentals of Materials Science (part 2)**								
6				Engineering Design						Fundamentals of Materials Science II	VL	2						
7	**Linear Algebra**			Fundamentals of Mechanical	HÜ	2	**Computer Engineering**			**Advanced Mechanical Engineering Design**			**Measurement Technology for Mechanical and**			**Integrated Product Development and**		
8	Linear Algebra	VL	4	Engineering Design			Computer Engineering	VL	3	**(part 2)**			**Process Engineers**			**Lightweight Design**		
	Linear Algebra	HÜ	2				Computer Engineering	UE	1	Advanced Mechanical Engineering	VL	2	Measurement Technology for	VL	2	Integrated Product Development I	VL	2
	Linear Algebra	UE	2							Design II			Mechanical and Process Engineers			Development of Lightweight Design	VL	2
9				**Technical Thermodynamics I**						Advanced Mechanical Engineering	HÜ	2	Measurement Technology for	HÜ	1	Products		
10				Technical Thermodynamics I	VL	2				Design II			Mechanical and Process Engineers			CAE-Team Project	POL	2
11				Technical Thermodynamics I	HÜ	1				**Signals and Systems**			Practical Course: Measurement and	PR	2			
12				Technical Thermodynamics I	UE	1				Signals and Systems	VL	3	Control Systems					
13							**Mathematics III**			Signals and Systems	HÜ	1	**Advanced Mechanical Design Project**			**Bachelor Thesis**		
14							Analysis III	VL	2				Advanced Mechanical Design Project	TT	4			
15	**Electrical Engineering I**			**Mathematical Analysis**			Analysis III	UE	1	**Fluid Dynamics**								
16	Electrical Engineering I	VL	3	Mathematical Analysis	VL	4	Analysis III	HÜ	1	Fluid Mechanics	VL	3						
17	Electrical Engineering I	UE	2	Mathematical Analysis	HÜ	2	Differential Equations 1	VL	2	Fluid Mechanics	HÜ	1						
18				Mathematical Analysis	UE	2	Differential Equations 1	UE	1									
19							Differential Equations 1	HÜ	1				**Production Technology**					
20													Forming and Cutting Technology	VL	2			
21	**Mechanics I (GES)**						**Mechanics III (GES)**			**Mechanics IV (Kinetics II, Oscillations,**			Forming and Cutting Technology	HÜ	1			
22	Mechanics I	VL	2				Mechanics III	HÜ	1	**Analytical Mechanics, Multibody Systems)**			Fundamentals of Machine Tools	VL	3			
23	Mechanics I	HÜ	3				Mechanics III	UE	2	Mechanics IV	VL	3						
24				**Electrical Engineering II**			Mechanics III	VL	3	Mechanics IV	UE	2						
25				Electrical Engineering II	VL	3				Mechanics IV	HÜ	1	**Material Science Laboratory**					
26				Electrical Engineering II	UE	2							Companion Lecture for Materials	VL	2			
27	**Physics for Engineers (GES) (part 1)**						**Mechanical Engineering: Design (part 1)**			**Advanced Materials**			Science Laboratory					
28	Physics for Engineers	VL	2				Embodiment Design and 3D-CAD	VL	2	Advanced Materials Characterization	VL	2	Material Science Laboratory	PR	4			
29	Physics for Engineers	UE	1	**Mechanics II (GES)**			Mechanical Design Project I	TT	3	Advanced Materials Design	VL	2						
30				Mechanics II	VL	2				Advanced Materials Design	HÜ	2						
31				Mechanics II	HÜ	2	**Fundamentals of Materials Science (part 1)**											
32							Fundamentals of Materials Science I	VL	2									
33							Physical and Chemical Basics of	VL	2									
							Materials Science											

34			**Advanced Mechanical Engineering Design (part 1)**
35		**Programming in C**	Advanced Mechanical Engineering Design I VL 2
36		Programming in C VL 1	Advanced Mechanical Engineering Design I HÜ 2
		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.