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 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	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	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			
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															
	Chemistry II	HÜ	1				Technical Thermodynamics II	UE	1												
4										**Fundamentals of Materials Science (part 2)**											
5										Fundamentals of Materials Science II	VL	2									
6										**Advanced Mechanical Engineering Design (part 2)**											
7	**Linear Algebra**			**Technical Thermodynamics I**			**Mathematics III**			Advanced Mechanical Engineering Design II	VL	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	HÜ	2	Introduction to Control Systems	VL	2	Integrated Product Development I	VL	2			
	Linear Algebra	HÜ	2	Technical Thermodynamics I	HÜ	1	Analysis III	UE	1				Introduction to Control Systems	UE	2	Development of Lightweight Design Products	VL	2			
	Linear Algebra	UE	2	Technical Thermodynamics I	UE	1	Analysis III	HÜ	1							CAE-Team Project	PBL	2			
9							Differential Equations 1	VL	2	**Production Engineering (part 2)**											
10							Differential Equations 1	UE	1	Production Engineering II	VL	2									
11							Differential Equations 1	HÜ	1	Production Engineering II	HÜ	1									
12										**Fluid Dynamics**											
13				**Mathematical Analysis**						Fluid Mechanics	VL	3	**Measurement Technology for Mechanical and Process Engineers**			**Enhanced Fundamentals of Materials Science**					
14				Mathematical Analysis	VL	4				Fluid Mechanics	HÜ	2	Measurement Technology for Mechanical and Process Engineers	VL	2	Enhanced Fundamentals: Metals	VL	2			
15	**Electrical Engineering I**			Mathematical Analysis	HÜ	2	**Mechanics III (GES)**						Measurement Technology for Mechanical and Process Engineers	HÜ	1	Enhanced Fundamentals: Ceramics and Polymers	VL	2			
16	Electrical Engineering I	VL	3	Mathematical Analysis	UE	2	Mechanics III	HÜ	1	**Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)**			Practical Course: Measurement and Control Systems	PR	2	Enhanced Fundamentals: Ceramics and Polymers	HÜ	1			
17	Electrical Engineering I	UE	2				Mechanics III	UE	2	Mechanics IV	VL	3									
18							Mechanics III	VL	3	Mechanics IV	UE	2									
										Mechanics IV	HÜ	1									
19													**Advanced Mechanical Design Project**			**Advanced Materials**			**Bachelor Thesis**		
20													Advanced Mechanical Design Project	PBL	4	Advanced Materials Characterization	VL	2			
21																Advanced Materials	VL	2			
22	**Mechanics I (GES)**			**Electrical Engineering II**			**Mechanical Engineering:**														

23	Mechanics I VL 2 Mechanics I HÜ 3	Electrical Engineering II VL 3 Electrical Engineering II UE 2	**Design (part 1)** Embodiment Design and 3D-CAD VL 2 Mechanical Design Project I TT 3			Design Advanced Materials Design HÜ 2	
24			**Fundamentals of Materials Science (part 1)** Fundamentals of Materials Science I VL 2 Physical and Chemical Basics of Materials Science VL 2				
25							
26							
27	**Programming in C** Programming in C VL 1 Programming in C PR 1	**Mechanics II (GES)** Mechanics II VL 2 Mechanics II HÜ 2			**Production Technology** Forming and Cutting Technology VL 2 Forming and Cutting Technology HÜ 1 Fundamentals of Machine Tools VL 2 Fundamentals of Machine Tools HÜ 1		
28			**Advanced Mechanical Engineering Design (part 1)** Advanced Mechanical Engineering Design I VL 2 Advanced Mechanical Engineering Design I HÜ 2				
29							
30	**Physics for Engineers (GES)** Physics for Engineers VL 2 Physics for Engineers UE 1						
31			**Production Engineering (part 1)** Production Engineering I VL 2 Production Engineering I HÜ 1				
32							
33							

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.