Course of Study General Engineering Science (English program, 7 semester) (Study Cohort w17)

Sample course plan B Bachelor General Engineering Science (English program, 7 semester) (GESBS(7))
Specialisation Mechanical Engineering, Focus Materials in Engineering Sciences

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)**			**Technical Thermodynamics I**			**Technical Thermodynamics II**			**Mechanical Engineering: Design (part 2)**			**Computer Engineering**			**Foundations of Management**			**Advanced Internship AIW/ GES**		
2	Chemistry I	VL	2	Technical Thermodynamics I	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 I	HÜ	1	Technical Thermodynamics II	HÜ	1	Mechanical Design Project II	PBL	3	Computer Engineering	UE	1	Management Tutorial	HÜ	2			
	Chemistry I	HÜ	1	Technical Thermodynamics I	UE	1	Technical Thermodynamics II	UE	1												
4	Chemistry II	HÜ	1							**Fundamentals of Materials Science (part 2)**											
5										Fundamentals of Materials Science II	VL	2									
6										**Advanced Mechanical Engineering Design (part 2)**											
7	**Linear Algebra**			**Mathematical Analysis**			**Mathematics III**			Advanced Mechanical Engineering Design II	VL	2	**Introduction to Control Systems**			**Enhanced Fundamentals of Materials Science**					
8	Linear Algebra	VL	4	Mathematical Analysis	VL	4	Analysis III	VL	2	Advanced Mechanical Engineering Design II	HÜ	2	Introduction to Control Systems	VL	2	Enhanced Fundamentals: Metals	VL	2			
	Linear Algebra	HÜ	2	Mathematical Analysis	HÜ	2	Analysis III	UE	1				Introduction to Control Systems	UE	2	Enhanced Fundamentals: Ceramics and Polymers	VL	2			
	Linear Algebra	UE	2	Mathematical Analysis	UE	2	Analysis III	HÜ	1							Enhanced Fundamentals: Ceramics and Polymers	HÜ	1			
9							Differential Equations 1	VL	2	**Fluid Dynamics**											
10							Differential Equations 1	UE	1	Fluid Mechanics	VL	3									
11							Differential Equations 1	HÜ	1	Fluid Mechanics	HÜ	2									
12																					
13													**Measurement Technology for Mechanical and Process Engineers**			**Structural Materials (part 2)**					
14													Measurement Technology for Mechanical and Process Engineers	VL	2	Fundamentals of Mechanical Properties of Materials	VL	2			
15	**Electrical Engineering I**			**Electrical Engineering II**			**Mechanics III (GES)**			**Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)**			Measurement Technology for Mechanical and Process Engineers	HÜ	1	**Fundamentals of Production and Quality Management**					
16	Electrical Engineering I	VL	3	Electrical Engineering II	VL	3	Mechanics III	HÜ	1	Mechanics IV	VL	3	Practical Course: Measurement and Control Systems	PR	2	Production Process Organization	VL	2			
17	Electrical Engineering I	UE	2	Electrical Engineering II	UE	2	Mechanics III	UE	2	Mechanics IV	UE	2				Quality Management	VL	2			
18							Mechanics III	VL	3	Mechanics IV	HÜ	1									
19													**Numerical Mathematics I**						**Bachelor Thesis**		
20													Numerical Mathematics I	VL	2						
21	**Mechanics I (GES)**			**Mechanics II (GES)**			**Mechanical Engineering:**			**Signals and Systems**											

22	Mechanics I VL 2	Mechanics II VL 2	**Design (part 1)**	Signals and Systems VL 3	Numerical Mathematics I UE 2	
23	Mechanics I HÜ 3	Mechanics II HÜ 2	Embodiment Design and 3D-CAD VL 2	Signals and Systems UE 2		
			Mechanical Design Project I PBL3			
24			**Fundamentals of Materials Science (part 1)**			
25					**Structural Materials (part 1)**	
26			Fundamentals of Materials Science I VL 2		Welding Technology VL 3	
27	**Programming in C**	**Fundamentals of Mechanical Engineering (GES)**	Physical and Chemical Basics of Materials Science VL 2			
	Programming in C VL 1	Fundamentals of Mechanical Engineering VL 2	**Advanced Mechanical Engineering Design (part 1)**		**Material Science Laboratory**	
28	Programming in C PR 1		Advanced Mechanical Engineering Design I VL 2		Companion Lecture for Materials Science Laboratory VL 2	
29	**Physics for Engineers (GES)**	Fundamentals of Mechanical Engineering UE 2	Advanced Mechanical Engineering Design I HÜ 2		Material Science Laboratory PR 4	
30	Physics for Engineers VL 2					
	Physics for Engineers UE 1					
31						
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.