Course of Study General Engineering Science (English program, 7 semester) (Study Cohort w19)

Legend:

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

Sample course plan C Bachelor General Engineering Science (English program, 7 semester) (GESBS(7))
Specialisation Mechanical Engineering, Focus Product Development and Production

LP	Semester 1	FormHrs/wk	Semester 2	FormHrs/wk	Semester 3	FormHrs/wk	Semester 4	FormHrs/wk	Semester 5	FormHrs/wk	Semester 6	FormHrs/wk	Semester 7	FormHrs/wk
1	**Chemistry (GES)**		**Technical Thermodynamics I**		**Technical Thermodynamics II**		**Mechanical Engineering: Design (part 2)**		**Computer Engineering**		**Foundations of Management**		**Advanced Internship AIW/ ES**	
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	Advanced Internship AIW/ ES: Preparation	SE 1
3	Chemistry II	VL 2	Technical Thermodynamics I	HÜ 1	Technical Thermodynamics II	HÜ 1	Mechanical Design Project II	PBL 3	Computer Engineering	GÜ 1	Management Tutorial	GÜ 2	Advanced Intenship AIW/ ES: Internship-accompanying Seminar	SE 1
4	Chemistry I	HÜ 1	Technical Thermodynamics I	GÜ 1	Technical Thermodynamics II	GÜ 1	**Fundamentals of Materials Science (part 2)**							
5	Chemistry II	HÜ 1					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**		**Integrated Product Development and Lightweight Design**			
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	Integrated Product Development I	VL 2		
9	Linear Algebra	HÜ 2	Mathematical Analysis	HÜ 2	Analysis III	GÜ 1			Introduction to Control Systems	GÜ 2	Development of Lightweight Design Products	VL 2		
10	Linear Algebra	GÜ 2	Mathematical Analysis	GÜ 2	Analysis III	HÜ 1	**Production Engineering (part 2)**				CAE-Team Project	PBL 2		
11					Differential Equations 1	VL 2	Production Engineering II	VL 2						
12					Differential Equations 1	GÜ 1	Production Engineering II	HÜ 1						
13					Differential Equations 1	HÜ 1	**Fluid Dynamics**		**Measurement Technology for Mechanical Engineers**		**Enhanced Fundamentals of Materials Science**			
14							Fluid Mechanics	VL 3	Measurement Technology for Mechanical Engineering	VL 2	Enhanced Fundamentals: Metals	VL 2		
15	**Electrical Engineering I**		**Electrical Engineering II**		**Engineering Mechanics III (GES)**		Fluid Mechanics	HÜ 2	Measurement Technology for Mechanical Engineering	HÜ 1	Enhanced Fundamentals: Ceramics and Polymers	VL 2		
16	Electrical Engineering I	VL 3	Electrical Engineering II	VL 3	Mechanics III	HÜ 1			Practical Course: Measurement and Control Systems	PR 2	Enhanced Fundamentals: Ceramics and Polymers	HÜ 1		
17	Electrical Engineering I	GÜ 2	Electrical Engineering II	GÜ 2	Mechanics III	GÜ 2	**Mechanics IV (Oscillations, Analytical Mechanics, Multibody Systems, Numerical Mechanics)**							
18					Mechanics III	VL 3	Mechanics IV	VL 3	**Advanced Mechanical Design Project**		**Advanced Materials**		**Bachelor Thesis**	
19							Mechanics IV	GÜ 2	Advanced Mechanical Design Project	PBL 4	Advanced Materials Characterization	VL 2		
20							Mechanics IV	HÜ 1			Advanced Materials Design	VL 2		
21	**Mechanics I (GES)**		**Mechanics II (GES)**		**Mechanical Engineering: Design (part 1)**						Advanced Materials Design	HÜ 2		
22	Mechanics I	VL 2	Mechanics II	VL 2	Embodiment Design and 3D-CAD	VL 2								
23	Mechanics I	HÜ 3	Mechanics II	HÜ 2	Mechanical Design Project I	PBL 3			**Production Technology**					
24					**Fundamentals of Materials Science (part 1)**				Forming and Cutting Technology	VL 2				
25					Fundamentals of Materials Science I	VL 2			Forming and Cutting Technology	HÜ 1				
26					Physical and Chemical Basics of Materials Science	VL 2			Fundamentals of Machine Tools	VL 2				
27	**Programming in C**		**Fundamentals of Mechanical Engineering Design (GES)**						Fundamentals of Machine Tools	HÜ 1				
28	Programming in C	VL 1	Fundamentals of Mechanical Engineering	VL 2	**Advanced Mechanical Engineering Design (part 1)**									
29	Programming in C	PR 1	Fundamentals of Mechanical Engineering	GÜ 2	Advanced Mechanical Engineering Design I	VL 2								
30	**Physics for Engineers (GES)**				Advanced Mechanical Engineering Design I	HÜ 2								
31	Physics for Engineers	VL 2			**Production Engineering (part 1)**									
32	Physics for Engineers	GÜ 1			Production Engineering I	VL 2								
33					Production Engineering I	HÜ 1								

Non-technical 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.