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

Sample course plan A 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)**			**Technical Thermodynamics I**			**Technical Thermodynamics II**			**Mechanical Engineering: Design (part 2)**			**Computer Engineering**			**Foundations of Management**			**Advanced Internship 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			
4	Chemistry I	HÜ	1	Technical Thermodynamics I	UE	1	Technical Thermodynamics II	UE	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	UE	1				Introduction to Control Systems	UE	2	Development of Lightweight Design Products	VL	2			
10	Linear Algebra	UE	2	Mathematical Analysis	UE	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	UE	1	Production Engineering II	HÜ	1									
13							Differential Equations 1	HÜ	1	**Fluid Dynamics**			**Measurement Technology for Mechanical and Process Engineers**			**Enhanced Fundamentals of Materials Science**					
14										Fluid Mechanics	VL	3	Measurement Technology for Mechanical and Process Engineers	VL	2	Enhanced Fundamentals: Metals	VL	2			
15	**Electrical Engineering I**			**Electrical Engineering II**			**Mechanics III (GES)**			Fluid Mechanics	HÜ	2	Measurement Technology for Mechanical and Process Engineers	HÜ	1	Enhanced Fundamentals: Ceramics and Polymers	VL	2			
16	Electrical Engineering I	VL	3	Electrical Engineering II	VL	3	Mechanics III	HÜ	1							Enhanced Fundamentals: Ceramics and Polymers	HÜ	1			
17	Electrical Engineering I	UE	2	Electrical Engineering II	UE	2	Mechanics III	UE	2				Practical Course: Measurement and Control Systems	PR	2						
18							Mechanics III	VL	3	**Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)**											
19										Mechanics IV	VL	3	**Advanced Mechanical**			**Electrical Machines and**			**Bachelor Thesis**		
20										Mechanics IV	UE	2									
										Mechanics IV	HÜ	1									

21	**Mechanics I (GES)**	**Mechanics II (GES)**	**Mechanical Engineering: Design (part 1)**		**Design Project**	**Actuators**
22	Mechanics I VL 2	Mechanics II VL 2	Embodiment Design and 3D-CAD VL 2		Advanced Mechanical Design Project PBL 4	Electrical Machines and Actuators VL 3
23	Mechanics I HÜ 3	Mechanics II HÜ 2	Mechanical Design Project I PBL 3			Electrical Machines and Actuators HÜ 2
24			**Fundamentals of Materials Science (part 1)**		**Production Technology**	
25			Fundamentals of Materials Science I VL 2		Forming and Cutting Technology VL 2	
26			Physical and Chemical Basics of Materials Science VL 2		Forming and Cutting Technology HÜ 1	
27	**Programming in C**	**Fundamentals of Mechanical Engineering Design (GES)**			Fundamentals of Machine Tools VL 2	
28	Programming in C VL 1	Fundamentals of Mechanical Engineering VL 2	**Advanced Mechanical Engineering Design (part 1)**		Fundamentals of Machine Tools HÜ 1	
29	Programming in C PR 1	Fundamentals of Mechanical Engineering UE 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 UE 1		Production Engineering I VL 2			
33			Production Engineering I HÜ 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.