Course of Study General Engineering Science (English program) (Study Cohort w15)

Sample course plan A 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	FormHrs/wk	Semester 2	FormHrs/wk	Semester 3	FormHrs/wk	Semester 4	FormHrs/wk	Semester 5	FormHrs/wk	Semester 6	FormHrs/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/ AIW/ GES	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 Design**		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	Fundamentals of Mechanical Engineering Design	VL 2	Technical Thermodynamics II	UE 1	**Fundamentals of Materials Science (part 2)**					
5	Chemistry II	HÜ 1	Fundamentals of Mechanical Engineering Design	HÜ 2			Fundamentals of Materials Science II	VL 2				
6							**Advanced Mechanical Engineering Design (part 2)**					
7	**Linear Algebra**				**Computer Engineering**				**Measurement Technology for Mechanical and Process Engineers**		**Integrated Product Development and Lightweight Design**	
8	Linear Algebra	VL 4			Computer Engineering	VL 3	Advanced Mechanical Engineering Design II	VL 2	Measurement Technology for Mechanical and Process Engineers	VL 2	Integrated Product Development I	VL 2
	Linear Algebra	HÜ 2			Computer Engineering	UE 1	Advanced Mechanical Engineering Design II	HÜ 2	Measurement Technology for Mechanical and Process Engineers	HÜ 1	Development of Lightweight Design Products	VL 2
9	Linear Algebra	UE 2	**Technical Thermodynamics I**				**Signals and Systems**		Practical Course: Measurement and Control Systems	PR 2	CAE-Team Project	POL 2
10			Technical Thermodynamics I	VL 2			Signals and Systems	VL 3				
11			Technical Thermodynamics I	HÜ 1			Signals and Systems	HÜ 1				
12			Technical Thermodynamics I	UE 1								
13					**Mathematics III**				**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			**Production Technology**			
19					Differential Equations 1	HÜ 1			Forming and Cutting Technology	VL 2		
20									Forming and Cutting Technology	HÜ 1		
21	**Mechanics I (GES)**				**Mechanics III (GES)**		**Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)**		Fundamentals of Machine Tools	VL 3		
22	Mechanics I	VL 2			Mechanics III	HÜ 1	Mechanics IV	VL 3				
23	Mechanics I	HÜ 3	**Electrical Engineering II**		Mechanics III	UE 2	Mechanics IV	UE 2				
24			Electrical Engineering II	VL 3	Mechanics III	VL 3	Mechanics IV	HÜ 1				
25			Electrical Engineering II	UE 2					**Material Science Laboratory**			
26									Companion Lecture for Materials Science Laboratory	VL 2		
27	**Physics for Engineers (GES) (part 1)**				**Mechanical Engineering: Design (part 1)**		**Electrical Machines**		Material Science Laboratory	PR 4		
28	Physics for Engineers	VL 2			Embodiment Design and 3D-CAD	VL 2	Electrical Machines	VL 3				
29	Physics for Engineers	UE 1			Mechanical Design Project I	TT 3	Electrical Machines	HÜ 2				
30			**Mechanics II (GES)**									
31			Mechanics II	VL 2	**Fundamentals of Materials Science (part 1)**							
32			Mechanics II	HÜ 2	Fundamentals of Materials Science I	VL 2						
33					Physical and Chemical Basics of Materials Science	VL 2						

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

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.