

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

Sample course plan C 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	FormHrs	Semester 2	FormHrs	Semester 3	FormHrs	Semester 4	FormHrs	Semester 5	FormHrs	Semester 6	FormHrs	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 GES																	
2															Chemistry I	VL 2	Technical Thermodynamics I	VL 2	Technical Thermodynamics II	VL 2	Team Project Design Methodology	PBL2	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	PBL3	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	Technical Thermodynamics I		Technical Thermodynamics II								Fundamentals of Materials Science II	VL 2		
6																					Advanced Mechanical Engineering Design (part 2)		Introduction to Control Systems		Enhanced Fundamentals of Materials Science					
7	Linear Algebra		Mathematical Analysis		Mathematics III		Advanced Mechanical Engineering Design II		VL 2	VL 2	Enhanced Fundamentals of Materials Science	VL 2																		
8														Linear Algebra	VL 4	Mathematical Analysis	VL 4	Analysis III	VL 2	Advanced Mechanical Engineering Design II	UE 1	Introduction to Control Systems		VL 2		Enhanced Fundamentals of Materials Science	VL 2			
9														Linear Algebra	HÜ 2	Mathematical Analysis	HÜ 2	Analysis III	HÜ 1	Advanced Mechanical Engineering Design II	HÜ 2	Introduction to Control Systems		UE 2		Enhanced Fundamentals of Materials Science	VL 2			
10														Linear Algebra	UE 2	Mathematical Analysis	UE 2	Analysis III	HÜ 1	Fluid Dynamics						Enhanced Fundamentals of Materials Science	HÜ 1			
11																		Differential Equations 1	VL 2									Fluid Mechanics	VL 3	
12																		Differential Equations 1	UE 1				Fluid Mechanics		HÜ 2					
13					Differential Equations 1	HÜ 1	Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)				Structural Materials (part 2)																			
14	Electrical Engineering I		Electrical Engineering II		Mechanics III (GES)								Mechanics IV	VL 3	VL 2	VL 2	Fundamentals of Mechanical Properties of Materials	VL 2												
15																			Electrical Engineering I	VL 3	Electrical Engineering II	VL 3	Mechanics III	HÜ 1	Mechanics IV	UE 2	Measurement Technology for Mechanical and Process Engineers	HÜ 1	Advanced Materials Characterization	VL 2
16																			Electrical Engineering I	UE 2	Electrical Engineering II	UE 2	Mechanics III	UE 2	Mechanics IV	HÜ 1	Measurement Technology for Mechanical and Process Engineers	PR 2	Advanced Materials Design	VL 2
17																							Mechanics III	VL 3	Mechanics IV	HÜ 1	Practical Course: Measurement and Control Systems		Advanced Materials Design	HÜ 2
18																							Mechanics III	VL 3	Mechanics IV	HÜ 1	Numerical Mathematics I		Bachelor Thesis	
19																					Numerical Mathematics I	VL 2								
20																														
21	Mechanics I (GES)		Mechanics II (GES)		Mechanical Engineering: Design (part 1)		Signals and Systems																							
22													Mechanics I	VL 2	Mechanics II	VL 2	Signals and Systems	VL 3	Signals and Systems	VL 3	Numerical Mathematics	UE 2								

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