

Course of Study General Engineering Science (English program, 7 semester) (Study Cohort w16)

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	Form/hrs/Week	Semester 2	Form/hrs/Week	Semester 3	Form/hrs/Week	Semester 4	Form/hrs/Week	Semester 5	Form/hrs/Week	Semester 6	Form/hrs/Week	Semester 7	Form/hrs/Week						
1	Chemistry (GES)	VL 2	Fundamentals of Mechanical Engineering Design	VL 2	Technical Thermodynamics II	VL 2	Mechanical Engineering: Design (part 2)	PBL2	Computer Engineering	VL 3	Foundations of Management	VL 3	Advanced Internship GES							
2															Chemistry I	Fundamentals of Mechanical Engineering Design	Technical Thermodynamics II	Team Project Design Methodology	Computer Engineering	Introduction to Management
3															Chemistry II	Fundamentals of Mechanical Engineering Design	Technical Thermodynamics II	Mechanical Design Project II	Computer Engineering	Management Tutorial
4															Chemistry I	Fundamentals of Mechanical Engineering Design	Technical Thermodynamics II			
5															Chemistry II	Fundamentals of Mechanical Engineering Design	Technical Thermodynamics II			
6																				
7																				
8	Linear Algebra	VL 4	Technical Thermodynamics I	VL 2	Mathematics III	VL 2	Advanced Mechanical Engineering Design (part 2)	VL 2	Introduction to Control Systems	VL 2	Enhanced Fundamentals of Materials Science	VL 2								
9															Linear Algebra	Technical Thermodynamics I	Analysis III	Advanced Mechanical Engineering Design II	Introduction to Control Systems	Enhanced Fundamentals: Metals
10															Linear Algebra	Technical Thermodynamics I	Analysis III	Advanced Mechanical Engineering Design II	Introduction to Control Systems	Enhanced Fundamentals: Ceramics and Polymers
11															Linear Algebra	Technical Thermodynamics I	Differential Equations 1	Fluid Dynamics	Introduction to Control Systems	Enhanced Fundamentals: Ceramics and Polymers
12																	Differential Equations 1	Fluid Mechanics		
13																	Differential Equations 1	Fluid Mechanics		
14																				
15	Electrical Engineering I	VL 3	Mathematical Analysis	VL 4	Mechanics III (GES)	HÜ 1	Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)	VL 3	Measurement Technology for Mechanical and Process Engineers	VL 2	Structural Materials (part 2)	VL 2								
16															Electrical Engineering I	Mathematical Analysis	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Advanced Materials Characterization
17															Electrical Engineering I	Mathematical Analysis	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Advanced Materials Design
18																			Practical Course: Measurement and Control Systems	Advanced Materials Design
19																				
20													Bachelor Thesis							
21	Mechanics I (GES)	VL 2	Electrical Engineering II	VL 3	Mechanical Engineering: Design (part 1)	VL 3	Signals and Systems	VL 3	Numerical Mathematics I	VL 2										
22														Mechanics I	Electrical Engineering II	Embodiment Design and 3D-CAD	Signals and Systems	Numerical Mathematics I		
23													Mechanics I	Electrical Engineering II	Mechanical Design	Signals and Systems	Numerical Mathematics I			

24			Project I			
25			Fundamentals of Materials Science (part 1)			
26			Fundamentals of Materials Science I	VL 2		Structural Materials (part 1)
27	Programming in C	Mechanics II (GES)	Physical and Chemical Basics of Materials Science	VL 2		Welding Technology VL 3
	Programming in C VL 1	Mechanics II VL 2				
	Programming in C PR 1	Mechanics II HÜ 2				
28			Advanced Mechanical Engineering Design (part 1)			Material Science Laboratory
29	Physics for Engineers (GES)		Advanced Mechanical Engineering Design I	VL 2		Companion Lecture for Materials Science Laboratory VL 2
30	Physics for Engineers VL 2		Advanced Mechanical Engineering Design I	HÜ 2		Material Science Laboratory PR 4
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.