

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 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	Semester 2	Form	Semester 3	Form	Semester 4	Form	Semester 5	Form	Semester 6	Form	Semester 7	Form						
1	Chemistry (GES)	VL 2	Technical Thermodynamics I	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	Technical Thermodynamics I	Technical Thermodynamics II	Team Project Design Methodology	Computer Engineering	Introduction to Management
3															Chemistry II	Technical Thermodynamics I	Technical Thermodynamics II	Mechanical Design Project II	Computer Engineering	Management Tutorial
															Chemistry I	Technical Thermodynamics I	Technical Thermodynamics II			
															Chemistry II	Technical Thermodynamics I	Technical Thermodynamics II			
4																				
5							Fundamentals of Materials Science (part 2)													
							Fundamentals of Materials Science II	VL 2												
6																				
7	Linear Algebra	VL 4	Mathematical Analysis	VL 4	Mathematics III	VL 2	Advanced Mechanical Engineering Design (part 2)	VL 2	Introduction to Control Systems	VL 2	Integrated Product Development and Lightweight Design	VL 2								
8															Linear Algebra	Mathematical Analysis	Analysis III	Advanced Mechanical Engineering Design II	Introduction to Control Systems	Integrated Product Development I
															Linear Algebra	Mathematical Analysis	Analysis III	Advanced Mechanical Engineering Design II	Introduction to Control Systems	Development of Lightweight Design Products
															Linear Algebra	Mathematical Analysis	Analysis III		Introduction to Control Systems	CAE-Team Project
9																				
10							Production Engineering (part 2)													
							Production Engineering II	VL 2												
							Production Engineering II	HÜ 1												
12																				
13							Fluid Dynamics													
							Fluid Mechanics	VL 3	Measurement Technology for Mechanical and Process Engineers	VL 2	Enhanced Fundamentals of Materials Science	VL 2								
14						Fluid Mechanics	HÜ 2	Enhanced Fundamentals: Metals												
								Enhanced Fundamentals: Ceramics and Polymers												
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								Enhanced Fundamentals: Ceramics and Polymers												
15	Electrical Engineering I	VL 3	Electrical Engineering II	VL 3	Mechanics III (GES)	HÜ 1	Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)	VL 3	Measurement Technology for Mechanical and Process Engineers	HÜ 1	Enhanced Fundamentals of Materials Science	HÜ 1								
16															Electrical Engineering I	Electrical Engineering II	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Enhanced Fundamentals: Metals
17															Electrical Engineering I	Electrical Engineering II	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Enhanced Fundamentals: Ceramics and Polymers
18															Electrical Engineering I	Electrical Engineering II	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Enhanced Fundamentals: Ceramics and Polymers
19																				
20									Advanced Mechanical		Advanced Materials		Bachelor Thesis							

21	Mechanics I (GES) Mechanics I VL 2 Mechanics I HÜ 3	Mechanics II (GES) Mechanics II VL 2 Mechanics II HÜ 2	Mechanical Engineering: Design (part 1) Embodiment Design and 3D-CAD VL 2 Mechanical Design Project I PBL3		Design Project Advanced Mechanical Design Project PBL4	Advanced Materials Characterization VL 2		
Advanced Materials Design VL 2								
Advanced Materials Design HÜ 2								
24			Fundamentals of Materials Science (part 1) Fundamentals of Materials Science I VL 2 Physical and Chemical Basics of Materials Science VL 2		Production Technology Forming and Cutting Technology VL 2 Forming and Cutting Technology HÜ 1 Fundamentals of Machine Tools VL 2 Fundamentals of Machine Tools HÜ 1			
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	Advanced Mechanical Engineering Design (part 1) Advanced Mechanical Engineering Design I VL 2 Advanced Mechanical Engineering Design I HÜ 2					
28								
29								
30	Physics for Engineers (GES) Physics for Engineers VL 2 Physics for Engineers UE 1							
31								
32								
33			Production Engineering (part 1) Production Engineering I VL 2 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.