

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

Sample course plan B 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	ForHrs	Semester 2	ForHrs	Semester 3	ForHrs	Semester 4	ForHrs	Semester 5	ForHrs	Semester 6	ForHrs	Semester 7	ForHrs/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	VL 2	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	HÜ 1	Fundamentals of Materials Science (part 2)					
5															Chemistry II	HÜ 1	Technical Thermodynamics I		Technical Thermodynamics II	UE 1						
6	Linear Algebra		Mathematical Analysis		Mathematics III		Advanced Mechanical Engineering Design (part 2)		Introduction to Control Systems		Integrated Product Development and Lightweight Design															
7														Linear Algebra	VL 4	Mathematical Analysis	VL 4	Analysis III	VL 2	Advanced Mechanical Engineering Design II	VL 2	Introduction to Control Systems	VL 2	Integrated Product Development I	VL 2	
8														Linear Algebra	HÜ 2	Mathematical Analysis	HÜ 2	Analysis III	UE 1	Advanced Mechanical Engineering Design II	HÜ 2	Introduction to Control Systems	UE 2	Development of Lightweight Design Products	VL 2	
9														Linear Algebra	UE 2	Mathematical Analysis	UE 2	Analysis III	HÜ 1	Production Engineering (part 2)				CAE-Team Project	PBL2	
10																		Differential Equations 1	VL 2							Production Engineering II
11					Differential Equations 1	UE 1	Production Engineering II	HÜ 1																		
12	Electrical Engineering I		Electrical Engineering II		Mechanics III (GES)		Fluid Dynamics		Measurement Technology for Mechanical and Process Engineers		Enhanced Fundamentals of Materials Science															
13																		Differential Equations 1	HÜ 1	Fluid Mechanics	VL 3	Measurement	VL 2	Enhanced Fundamentals: Metals	VL 2	
14																		Differential Equations 1	UE 1	Fluid Mechanics	HÜ 2	Technology for Mechanical and Process Engineers	VL 2	Enhanced Fundamentals: Ceramics and Polymers	VL 2	
15																		Differential Equations 1	UE 1	Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)						
16														Electrical Engineering I	VL 3	Electrical Engineering II	VL 3	Mechanics III	HÜ 1							Mechanics IV
17	Electrical Engineering I	UE 2	Electrical Engineering II	UE 2	Mechanics III	UE 2	Mechanics IV	UE 2	Technology for Mechanical and Process Engineers	PR 2																
18					Mechanics III	VL 3	Mechanics IV	HÜ 1	Practical Course: Measurement and Control Systems																	
19																										
20									Advanced Mechanical		Fundamentals of Production		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	and Quality Management Production Process Organization VL 2 Quality Management VL 2	
22							
23							
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		Production Engineering (part 1) Production Engineering I VL 2 Production Engineering I HÜ 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.