

Course of Study General Engineering Science (English program, 7 semester) (Study Cohort w17)

Sample course plan C Bachelor General Engineering Science (English program, 7 semester) (GESBS(7))
Specialisation Mechanical Engineering, Focus Theoretical Mechanical Engineering

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) Chemistry I Chemistry II Chemistry I Chemistry II	VL 2	Technical Thermodynamics I Technical Thermodynamics I Technical Thermodynamics I Technical Thermodynamics I	VL 2	Technical Thermodynamics II Technical Thermodynamics II Technical Thermodynamics II Technical Thermodynamics II	VL 2	Mechanical Engineering: Design (part 2) Team Project Design Methodology Mechanical Design Project II Fundamentals of Materials Science (part 2) Fundamentals of Materials Science II	VL 2	Computer Engineering Computer Engineering Computer Engineering	VL 3	Foundations of Management Introduction to Management Management Tutorial	VL 3	Advanced Internship AIW/ GES							
2																				
3																				
4																				
5																				
6																				
7	Linear Algebra Linear Algebra Linear Algebra Linear Algebra	VL 4	Mathematical Analysis Mathematical Analysis Mathematical Analysis Mathematical Analysis	VL 4	Mathematics III Analysis III Analysis III Analysis III Differential Equations 1 Differential Equations 1 Differential Equations 1	VL 2	Advanced Mechanical Engineering Design (part 2) Advanced Mechanical Engineering Design II Advanced Mechanical Engineering Design II Fluid Dynamics Fluid Mechanics Fluid Mechanics	VL 2	Introduction to Control Systems Introduction to Control Systems Introduction to Control Systems Measurement Technology for Mechanical and Process Engineers Measurement Technology for Mechanical and Process Engineers Measurement Technology for Mechanical and Process Engineers Practical Course: Measurement and Control Systems	VL 2	Mathematics IV Complex Functions Complex Functions Complex Functions Differential Equations 2 Differential Equations 2 Differential Equations 2	VL 2	Advanced Materials for Mechanical and Process Engineers Advanced Materials Characterization Advanced Materials Design Advanced Materials Design							
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15	Electrical Engineering I Electrical Engineering I Electrical Engineering I	VL 3	Electrical Engineering II Electrical Engineering II Electrical Engineering II	VL 3	Mechanics III (GES) Mechanics III Mechanics III Mechanics III	HÜ 1	Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems) Mechanics IV Mechanics IV Mechanics IV	VL 3	Advanced Mechanical Design Project Advanced Mechanical Design Project	PBL4	Production Engineering (part 2) Production Engineering II	VL 2	Bachelor Thesis							
16																				
17																				
18																				
19																				
20																				
21	Mechanics I (GES) Mechanics I	VL 2	Mechanics II (GES) Mechanics II	VL 2	Mechanical Engineering: Design (part 1)		Signals and Systems Signals and Systems	VL 3												

	Mechanics I	HÜ 3	Mechanics II	HÜ 2	Embodiment Design and 3D-CAD	VL 2	Signals and Systems	UE 2		Production Engineering II	HÜ 1	
22					Mechanical Design Project I	PBL3						
23												
24												
25					Fundamentals of Materials Science (part 1)							
26					Fundamentals of Materials Science I	VL 2			Production Engineering (part 1)			
27	Programming in C		Fundamentals of Mechanical Engineering (GES)		Physical and Chemical Basics of Materials Science	VL 2			Production Engineering I	VL 2		
	Programming in C	VL 1	Fundamentals of Mechanical Engineering	VL 2					Production Engineering I	HÜ 1		
	Programming in C	PR 1	Fundamentals of Mechanical Engineering	UE 2								
28					Advanced Mechanical Engineering Design (part 1)							
29	Physics for Engineers (GES)		Fundamentals of Mechanical Engineering		Advanced Mechanical Engineering Design I	VL 2						
30	Physics for Engineers	VL 2	Fundamentals of Mechanical Engineering		Advanced Mechanical Engineering Design I	HÜ 2						
	Physics for Engineers	UE 1										
31												
32												
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.