

Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w22)

Legend:	Core Qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
	Core Qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

Sample course plan B Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))

Specialisation	Mechanical Engineering	Focus	Energy Systems	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7
				FormHrs/wk	FormHrs/wk	FormHrs/wk	FormHrs/wk	FormHrs/wk
1	Chemistry		Electrical Engineering II: Alternating Current Networks and Basic Devices	Technical Thermodynamics II	Signals and Systems	Introduction to Control Systems	Foundations of Management	Advanced Internship AIW/ ES
2	Chemistry I+II VL 4		Electrical Engineering II: Alternating Current Networks and Basic Devices VL 3	Technical Thermodynamics II VL 2	Signals and Systems VL 3	Introduction to Control Systems VL 2	Introduction to Management VL 3	Advanced Internship AIW/ ES: SE 1
3	Chemistry I+II HÜ 2		Electrical Engineering II: Alternating Current Networks and Basic Devices GÜ 2	Technical Thermodynamics II HÜ 1	Signals and Systems GÜ 2	Introduction to Control Systems GÜ 2	Management Tutorial GÜ 2	Preparation
4			Electrical Engineering II: Alternating Current Networks and Basic Devices	Technical Thermodynamics II GÜ 1				Advanced Internship AIW/ ES: Internship-accompanying Seminar SE 1
5								
6								
7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		Fundamentals of Mechanical Engineering Design	Mathematics III	Fluid Dynamics	Measurement Technology for Mechanical Engineers	Electrical Machines and Actuators	
8	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields VL 3		Fundamentals of Mechanical Engineering Design VL 2	Analysis III VL 2	Fluid Mechanics VL 3	Measurement Technology for Mechanical Engineers VL 2	Electrical Machines and Actuators VL 3	
9	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields GÜ 2		Fundamentals of Mechanical Engineering Design HÜ 2	Analysis III GÜ 1	Fluid Mechanics HÜ 2	Measurement Technology for Mechanical Engineers HÜ 1	Electrical Machines and Actuators HÜ 2	
10				Differential Equations 1 VL 2		Measurement Technology for Mechanical Engineers		
11				Differential Equations 1 GÜ 1		Practical Course: Measurement and Control Systems PR 2		
12				Differential Equations 1 HÜ 1				
13	Mathematics I		Technical Thermodynamics I		Computational Mechanics	Heat Transfer	Computer Science for Engineers - Programming Concepts, Data Handling & Communication	
14	Mathematics I VL 4		Technical Thermodynamics I VL 2		Computational Multibody Dynamics IV 2	Heat Transfer VL 3	Computer Science for Engineers - Programming Concepts, Data Handling & Communication VL 3	
15	Mathematics I HÜ 2		Technical Thermodynamics I HÜ 1	Engineering Mechanics III (Dynamics)	Computational Mechanics GÜ 2	Heat Transfer HÜ 2	Computer Science for Engineers - Programming Concepts, Data Handling & Communication GÜ 2	
16	Mathematics I GÜ 2		Technical Thermodynamics I GÜ 1	Engineering Mechanics III VL 3	Computational Structural Mechanics IV 2		Computer Science for Engineers - Programming Concepts, Data Handling & Communication	
17				Engineering Mechanics III GÜ 2			Computer Science for Engineers - Programming Concepts, Data Handling & Communication	
18				Engineering Mechanics III HÜ 1				
19			Mathematics II		Advanced Mechanical Engineering Design (part 2)	Reciprocating Machinery (part 1)	Reciprocating Machinery (part 2)	Bachelor Thesis
20		Mathematics II VL 4		Advanced Mechanical Engineering Design (part 1)	Fundamentals of Reciprocating Engines and Turbomachinery - Part Reciprocating Engines VL 1	Internal Combustion Engines I VL 2	Internal Combustion Engines I HÜ 1	
21		Mathematics II HÜ 2		Advanced Mechanical Engineering Design (part 1)	Advanced Mechanical Engineering Design II VL 2	Fundamentals of Reciprocating Engines and Turbomachinery - Part Reciprocating Engines HÜ 1		
22		Mathematics II GÜ 2		Advanced Mechanical Engineering Design (part 1)	Advanced Mechanical Engineering Design II HÜ 2	Fundamentals of Reciprocating Engines and Turbomachinery - Part Reciprocating Engines		
23	Computer Science for Engineers - Introduction and Overview			Advanced Mechanical Engineering Design (part 1)	Mechanical Engineering: Design (part 2)	Numerical Mathematics I VL 2		
24	Computer Science for Engineers - Introduction and Overview VL 3			Advanced Mechanical Engineering Design I VL 2	Team Project Design Methodology PBL 2	Numerical Mathematics I GÜ 2		
25	Computer Science for Engineers - Introduction and Overview GÜ 2			Advanced Mechanical Engineering Design I HÜ 2	Mechanical Design Project II PBL 3		Renewables Energy Systems und Energy Economy	
26				Mechanical Engineering: Design (part 1)			Renewable Energy VL 2	
27	Engineering Mechanics I (Stereostatics)		Engineering Mechanics II (Elastostatics)	Embodiment Design and 3D-CAD VL 2	Fundamentals of Materials Science (part 2)		Energy Systems and Energy Industry VL 2	
28	Engineering Mechanics I VL 2		Engineering Mechanics II VL 2	Introduction and Practical Training Mechanical Design Project I PBL 3	Fundamentals of Materials Science II VL 2		Power Industry VL 1	
29	Engineering Mechanics I GÜ 2		Engineering Mechanics II GÜ 2				Renewable Energy GÜ 1	
30	Engineering Mechanics I HÜ 1		Engineering Mechanics II HÜ 2					
31								
32								

Non-technical 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.

