

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

Sample course plan B Bachelor General Engineering Science (German program, 7 semester) (AIWBS(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/hrs	Semester 2	Form/hrs	Semester 3	Form/hrs	Semester 4	Form/hrs	Semester 5	Form/hrs	Semester 6	Form/hrs	Semester 7	Form/hrs/wk						
1	Chemistry	VL 2	Electrical Engineering II: Alternating Current Networks and Basic Devices	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 II	Team Project Design Methodology	Computer Engineering	Introduction to Management	
3															Chemistry II	Technical Thermodynamics II	Mechanical Design Project II	Computer Engineering	Management Tutorial	
															Chemistry I	Electrical Engineering II: Alternating Current Networks and Basic Devices	Technical Thermodynamics II			
															Chemistry II	Electrical Engineering II: Alternating Current Networks and Basic Devices	Technical Thermodynamics II			
4	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	VL 3	Fundamentals of Mechanical Engineering Design	VL 2	Mathematics III	VL 2	Advanced Mechanical Engineering Design (part 2)	VL 2	Introduction to Control Systems	VL 2	Mathematics IV	VL 2								
5															Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	Fundamentals of Mechanical Engineering Design	Analysis III	Advanced Mechanical Engineering Design II	Introduction to Control Systems	Complex Functions
6																	Analysis III	Advanced Mechanical Engineering Design II	Introduction to Control Systems	Complex Functions
7																	Analysis III	Advanced Mechanical Engineering Design II	Introduction to Control Systems	Complex Functions
8																	Differential Equations 1	Fluid Dynamics	Introduction to Control Systems	Differential Equations 2
9																	Differential Equations 1	Fluid Dynamics	Introduction to Control Systems	Differential Equations 2
10			Differential Equations 1	Fluid Dynamics	Introduction to Control Systems	Differential Equations 2														
11			Differential Equations 1	Fluid Dynamics	Introduction to Control Systems	Differential Equations 2														
12			Differential Equations 1	Fluid Dynamics	Introduction to Control Systems	Differential Equations 2														
13	Mathematics I	VL 2	Technical Thermodynamics I	VL 2	Mechanics III (Hydrostatics, Kinematics, Kinetics I)	VL 3	Mechanics IV (Kinetics II, Oscillations, Analytical Mechanics, Multibody Systems)	VL 3	Measurement Technology for Mechanical and Process Engineers	VL 2	Fundamentals of Production and Quality Management	VL 2								
14															Linear Algebra I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Production Process Organization
15															Linear Algebra I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Quality Management
16															Linear Algebra I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	
17															Analysis I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	
18															Analysis I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	
19																				
20																				
21	Mechanics I (Statics)	VL 2	Mechanics II: Mechanics of Materials	VL 2	Mechanical Engineering: Design (part 1)	VL 2	Signals and Systems	VL 3	Advanced Mechanical Design Project	PBL4	Production Engineering (part 2)	VL 2	Bachelor Thesis							
															Mechanics I	Mechanics II	Embodiment Design and 3D-CAD	Signals and Systems	Advanced Mechanical Design Project	Production Engineering II
															Mechanics I	Mechanics II		Signals and Systems		Production Engineering
															Mechanics I	Mechanics II		Signals and Systems		II

22				Mechanical Design TT 3			
23				Project I			
24							
25				Fundamentals of Materials Science (part 1)			
26			Mathematics II			Heat Transfer	
27	Programming in C	Linear Algebra II VL 2	UE 1	Fundamentals of Materials Science I VL 2		Heat Transfer VL 3	
	Programming in C VL 1	Linear Algebra II UE 1	HÜ 1	Physical and Chemical Basics of Materials Science VL 2		Heat Transfer HÜ 2	
	Programming in C PR 1	Analysis II VL 2	HÜ 1				
28		Analysis II HÜ 1					
29		Analysis II UE 1		Advanced Mechanical Engineering Design (part 1)			
30	Physics for Engineers (AIW)			Advanced Mechanical Engineering Design I VL 2			
	Physics for Engineers VL 2			Advanced Mechanical Engineering Design I HÜ 2			
	Physics for Engineers UE 1						
31						Production Engineering (part 1)	
32						Production Engineering I VL 2	
33						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.