

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

Sample course plan A 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/Week	Semester 2	Form/hrs/Week	Semester 3	Form/hrs/Week	Semester 4	Form/hrs/Week	Semester 5	Form/hrs/Week	Semester 6	Form/hrs/Week	Semester 7	Form/hrs/Week						
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	Electrical Engineering II: Alternating Current	Technical Thermodynamics II	Team Project Design Methodology	Computer Engineering	Introduction to Management
3															Chemistry II	Electrical Engineering II: Networks and Basic Devices	Technical Thermodynamics II	Mechanical Design Project II	Computer Engineering	Management Tutorial
4															Chemistry I	Electrical Engineering II: Alternating Current	Technical Thermodynamics II	Fundamentals of Materials Science (part 2)	UE 1	
5															Chemistry II	Electrical Engineering II: Networks and Basic Devices	Technical Thermodynamics II	Fundamentals of Materials Science II	VL 2	
6																				
7	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								
8															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
9															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
10															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
11															Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	Fundamentals of Mechanical Engineering Design	Differential Equations 1	Fluid Dynamics	UE 2	Differential Equations 2
12															Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	Fundamentals of Mechanical Engineering Design	Differential Equations 1	Fluid Mechanics	VL 3	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	Electrical Machines	VL 3								
14															Linear Algebra I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Electrical Machines
15															Linear Algebra I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Electrical Machines
16															Linear Algebra I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Electrical Machines
17															Analysis I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Electrical Machines
18															Analysis I	Technical Thermodynamics I	Mechanics III	Mechanics IV	Measurement Technology for Mechanical and Process Engineers	Electrical Machines
19	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							
20															Mechanics I	Mechanics II	Embodiment Design and 3D-CAD	Signals and Systems	Advanced Mechanical Design Project	Production Engineering II
21															Mechanics I	Mechanics II	Embodiment Design and 3D-CAD	Signals and Systems	Advanced Mechanical Design Project	Production Engineering 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.