Course of Study General Engineering Science (German program) (Study Cohort w14)

Sample course plan A Bachelor General Engineering Science (German program) (AIWBS) Specialisation Mechanical Engineering, Focus Aircraft Systems Engineering

Legend:

Core qualification Compulsory

Core qualification Elective

Specialisation Compulsory

Specialisation Elective

Compulsory

Compulsory

Compulsory

Compulsory

Compulsory

Compulsory

Compulsory

Compulsory

LP	Semester 1 FormHrs/w	Vk Semester 2 FormHrs/v	Semester 3 FormHrs/w	Semester 4 FormHrs/wl	Semester 5 FormHrs/wl	Semester 6 FormHrs/wk
1	Physics for Engineers (part 1)	Electrical Engineering II: Alternating Current	Technical Thermodynamics II	Mechanical Engineering: Design (part 2)	Introduction to Control Systems	Foundations of Management
2	Physics for Engineers VL 2	Networks and Basic Devices	Technical Thermodynamics II VL 2	Team Project Design Methodology POL 2	Introduction to Control Systems VL 2	Introduction to Management VL 4
3	Physics for Engineers UE 1	Electrical Engineering II: Alternating VL 3	Technical Thermodynamics II HÜ 1	Mechanical Design Project II TT 3	Introduction to Control Systems UE 2	Project Entrepreneurship POL 2
		Current Networks and Basic Devices Electrical Engineering II: Alternating UE 2	Technical Thermodynamics II UE 1			
4		Current Networks and Basic Devices		Fundamentals of Materials Science (part 2) Fundamentals of Materials Science II VL 2		
5	Chemistry			rundamentals of Materials Science II VL 2		
6	Chemistry I VL 2 Chemistry II VL 2			Advanced Mechanical Engineering Design		
7	Chemistry I VL 2 Chemistry I HÜ 1	Fundamentals of Mechanical Engineering	Computer Engineering	(part 2)	Measurement Technology for Mechanical and	Integrated Product Development and
8	Chemistry II HÜ 1	Design	Computer Engineering VL 3	Advanced Mechanical Engineering VL 2 Design II	Process Engineers	Lightweight Design
		Fundamentals of Mechanical VL 2	Computer Engineering UE 1	Advanced Mechanical Engineering HÜ 2	Measurement Technology for VL 2 Mechanical and Process Engineers	Integrated Product Development I VL 2
		Engineering Design Fundamentals of Mechanical HÜ 2		Design II	Measurement Technology for HÜ 1	Development of Lightweight Design VL 2 Products
9		Engineering Design		Signals and Systems	Mechanical and Process Engineers	CAE-Team Project POL 2
10				Signals and Systems VL 3	Practical Course: Measurement and PR 2	
11	Electrical Engineering I: Direct Current	-		Signals and Systems HÜ 1	Control Systems	
12	Networks and Electromagnetic Fields					
	Electrical Engineering I: Direct Current VL 3					
13	Networks and Electromagnetic Fields	Technical Thermodynamics I	Mathematics III		Simulation of Dynamic Systems and Reliability	Aeronautical Systems
14	Electrical Engineering I: Direct Current UE 2 Networks and Electromagnetic Fields	Technical Thermodynamics I VL 2 Technical Thermodynamics I HÜ 1	Analysis III VL 2 Analysis III UE 1		Simulation of Dynamic Systems VL 2	Air Transportation Systems VL 2 Fundamentals of Aircraft Systems VL 2
15	Networks and Electromagnetic Freids	Technical Thermodynamics I UE 1	Analysis III HÜ 1	Fluid Dynamics	Reliability of Dynamic Systems VL 2	Fundamentals of Aircraft Systems UE 1
16			Differential Equations 1 VL 2	Fluid Mechanics VL 3	Simulation of Dynamic Systems UE 1	Air Transportation Systems HÜ 1
17	Mathematics I		Differential Equations 1 UE 1	Fluid Mechanics HÜ 1	Reliability of Dynamic Systems UE 1	
18	Linear Algebra I VL 2		Differential Equations 1 HÜ 1			
-	Linear Algebra I UE 1					
19	Linear Algebra I HÜ 1	Mechanics II: Mechanics of Materials Mechanics II VL 2			Advanced Mechanical Design Project Advanced Mechanical Design Project TT 4	Bachelor Thesis
20	Analysis I VL 2 Analysis I UE 1	Mechanics II UE 2			Advanced Mechanical Design Project 11 4	
21	Analysis I UE 1 Analysis I HÜ 1		Mechanics III (Hydrostatics, Kinematics,	Mechanics IV (Kinetics II, Oscillations,		
22	a.ye.e.		Kinetics I)	Analytical Mechanics, Multibody Systems)		
23			Mechanics III VL 3 Mechanics III UE 2	Mechanics IV VL 3 Mechanics IV UE 2		
24			Mechanics III HÜ 1	Mechanics IV HÜ 1		
25	Mechanics I (Statics)	Mathematics II				
26	Mechanics I VL 2	Linear Algebra II VL 2				
	Mechanics I UE 2	Linear Algebra II UE 1				
27	Mechanics I HÜ 1	Linear Algebra II HÜ 1	Mechanical Engineering: Design (part 1) Embodiment Design and 3D-CAD VL 2	Electrical Machines Electrical Machines VL 3		
28		Analysis II VL 2 Analysis II HÜ 1	Mechanical Design Project I TT 3	Electrical Machines VL 3		
29		Analysis II HÜ 1 Analysis II UE 1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
30		32 1	Fundamentals of Materials Science (part 1)			
31			Fundamentals of Materials Science I VL 2			
32	†		Physical and Chemical Basics of VL 2			
_	-	Programming in C	Materials Science		ı	
33	I	Programming in C		l e		

34	Programming in C Programming in C	VL PR		Advanced Mechanical Engineering Design (part 1)
35	Physics for Engineers (part 2)			Advanced Mechanical Engineering VL 2
36	Physics-Lab for ET/IIW-Engineers	PR	1	Design I Advanced Mechanical Engineering HÜ 2 Design I

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.