Course of Study General Engineering Science (German program) (Study Cohort w15)

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

Legend:

Core qualification Compulsory

Core qualification Elective

Specialisation Elective

Compulsory

Compulsory

Compulsory

Compulsory

Compulsory

Compulsory

Compulsory

Compulsory

Focus Compulsory

Interdisciplinary complement

LP	Semester 1 Form	mHrs/wk	Semester 2 FormHrs/w	Semester 3 Form	mHrs/wk	Semester 4	FormHrs/wk	Semester 5 FormHrs/w	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	L 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		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 (p				
5	Chemistry					Fundamentals of Materials Science II	VL 2			
6		L 2				Advanced Mechanical Engineering Do	esign			
7	*	L 2	Fundamentals of Mechanical Engineering	Computer Engineering		(part 2)		Measurement Technology for Mechanical and	Mathematics IV	
	Chemistry I HÜ Chemistry II HÜ	Ü 1	Design		3	Advanced Mechanical Engineering	VL 2	Process Engineers	Complex Functions	VL 2
8	Chemistry ii	J 1	Fundamentals of Mechanical VL 2	Computer Engineering UE		Design II		Measurement Technology for VL 2	Complex Functions	UE 1
			Engineering Design			Advanced Mechanical Engineering Design II	HÜ 2	Mechanical and Process Engineers	Complex Functions	HÜ 1
			Fundamentals of Mechanical HÜ 2					Measurement Technology for HÜ 1	Differential Equations 2	VL 2
9			Engineering Design			Signals and Systems		Mechanical and Process Engineers	Differential Equations 2	UE 1
10						Signals and Systems Signals and Systems	VL 3 HÜ 1	Practical Course: Measurement and PR 2 Control Systems	Differential Equations 2	HÜ 1
11	Electrical Engineering I: Direct Current					Signals and Systems	по і	Control Systems		
12	Networks and Electromagnetic Fields									
	Electrical Engineering I: Direct Current VL	L 3								
13	Networks and Electromagnetic Fields		Technical Thermodynamics I	Mathematics III				Simulation of Dynamic Systems and Reliability	Bachelor Thesis	
14	Electrical Engineering I: Direct Current UE	2	Technical Thermodynamics I VL 2 Technical Thermodynamics I HÜ 1	· ·	2			Simulation of Dynamic Systems VL 2		
15	Networks and Electromagnetic Fields		Technical Thermodynamics I HÜ 1 Technical Thermodynamics I UE 1	Analysis III UE Analysis III HÜ		Fluid Dynamics		Reliability of Dynamic Systems VL 2		
16			reclinical melinodynamics i OE i	•	2	Fluid Mechanics	VL 3	Simulation of Dynamic Systems UE 1		
-				Differential Equations 1 UE		Fluid Mechanics	HÜ 1	Reliability of Dynamic Systems UE 1		
17	Mathematics I			Differential Equations 1 HÜ						
18	· ·	L 2								
19	Linear Algebra I UE Linear Algebra I HÜ	≣ 1 "i 1	Mechanics II: Mechanics of Materials					Advanced Mechanical Design Project		
20	· · · · · · · · · · · · · · · · · · ·	L 2	Mechanics II VL 2					Advanced Mechanical Design Project TT 4		
	Analysis I UE		Mechanics II UE 2							
21	Analysis I HÜ	Ü 1	Mechanics II HÜ 2	Mechanics III (Hydrostatics, Kinematics, Kinetics I)		Mechanics IV (Kinetics II, Oscillations Analytical Mechanics, Multibody Syst	1			
22					3	Mechanics IV	VL 3			
23					2		UE 2			
24				Mechanics III HÜ	1 1	Mechanics IV	HÜ 1			
25	Mechanics I (Statics)		Mathematics II					Heat Transfer		
26	Mechanics I VL	L 2	Linear Algebra II VL 2					Heat Transfer VL 3		
	Mechanics I UE	2	Linear Algebra II UE 1					Heat Transfer HÜ 1		
27	Mechanics I HÜ	Ü 1	Linear Algebra II HÜ 1	Mechanical Engineering: Design (part 1)		Electrical Machines				
28			Analysis II VL 2	ŭ .	. 2	Electrical Machines	VL 3			
29			Analysis II HÜ 1	Mechanical Design Project I TT	3	Electrical Machines	HÜ 2			
30			Analysis II UE 1	Fundamentals of Materials Science (part 1	1)					
				Fundamentals of Materials Science VL						
31				Physical and Chemical Basics of VL						
32				•						
33	†		Programming in C	Materials Science						

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/ AIW/ GES	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.