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

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

Legend:

Core qualification Compulsory

Specialisation Compulsory

Focus Compulsory

Thesis Compulsory

	ialisation Mechanical Engineer				Core qualification Elective Compulsory		cialisation Elective	Focus Elective Con	npulsory Int	erdisciplinary con	nplement
LP	Semester 1 FormHrs/w	K Semester 2 FormHrs/w	K Semester 3 FormH	s/wk Sem	nester 4 F	ormHrs/w	Semester 5	FormHrs/wk	Semester 6		FormHrs/wk
1	Physics for Engineers (part 1)	Electrical Engineering II: Alternating Current	Technical Thermodynamics II	Mec	hanical Engineering: Design (part	2)	Introduction to Control Syst	ems	Foundations of N	lanagement	
2	Physics for Engineers VL 2	Networks and Basic Devices	Technical Thermodynamics II VL	Tear	m Project Design Methodology	POL 2	Introduction to Control Syste	ems VL 2	Introduction to M	anagement	VL 4
3	Physics for Engineers UE 1	Electrical Engineering II: Alternating VL 3	Technical Thermodynamics II HÜ		hanical Design Project II	TT 3	Introduction to Control Syste	ems UE 2	Project Entreprer	neurship	POL 2
	-	Current Networks and Basic Devices Electrical Engineering II: Alternating UE 2	Technical Thermodynamics II UE								
4		Current Networks and Basic Devices			damentals of Materials Science (pa damentals of Materials Science II						
5	Chemistry			Func	damentals of Materials Science II	VL Z					
6	Chemistry I VL 2 Chemistry II VL 2				anced Mechanical Engineering De	sign					
7	Chemistry I VL 2 Chemistry I HÜ 1	Fundamentals of Mechanical Engineering	Computer Engineering	(part			Measurement Technology fe	or Mechanical and	Semiconductor (Circuit Design	
8	Chemistry II HÜ 1	Design	Computer Engineering VL	Adva Desi		VL 2	Process Engineers		Semiconductor C	Circuit Design	VL 3
		Fundamentals of Mechanical VL 2	Computer Engineering UE			HÜ 2	Measurement Technology fo		Semiconductor C	Circuit Design	UE 1
		Engineering Design Fundamentals of Mechanical HÜ 2			ign II		Mechanical and Process Er Measurement Technology fo				
9		Engineering Design		Sign	nals and Systems		Mechanical and Process Er				
10				Sign	nals and Systems	VL 3	Practical Course: Measurem				
	Electrical Engineering I: Direct Coursent			Sign	nals and Systems	HÜ 1	Control Systems				
11	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields										
12	Electrical Engineering I: Direct Current VL 3										
13	Networks and Electromagnetic Fields	Technical Thermodynamics I	Mathematics III	_			Simulation of Dynamic Syst	ems and	Mathematics IV		
14	Electrical Engineering I: Direct Current UE 2	Technical Thermodynamics I VL 2	Analysis III VL				Reliability		Complex Functio		VL 2
15	Networks and Electromagnetic Fields	Technical Thermodynamics I HÜ 1	Analysis III UE Analysis III HÜ		d Dynamics		Simulation of Dynamic Syst Reliability of Dynamic Syste		Complex Functio		UE 1
16	-	Technical Thermodynamics I UE 1	Analysis III HÜ Differential Equations 1 VL		-	VL 3	Simulation of Dynamic Syste		Complex Function Differential Equa		HÜ 1 VL 2
			Differential Equations 1 UE		d Mechanics	HÜ 1	Reliability of Dynamic Syste		Differential Equa		UE 1
17	Mathematics I		Differential Equations 1 HÜ						Differential Equa		HÜ 1
18	Linear Algebra I VL 2 - Linear Algebra I UE 1										
19	Linear Algebra I HÜ 1	Mechanics II: Mechanics of Materials					Electrical Engineering III: C	ircuit Theory and	Bachelor Thesis		
20	Analysis I VL 2	Mechanics II VL 2					Transients				
21	Analysis I UE 1	Mechanics II UE 2	Mechanics III (Hydrostatics, Kinematics,	Mec	hanics IV (Kinetics II, Oscillations,		Circuit Theory	VL 3			
	Analysis I HÜ 1	Mechanics II HÜ 2	Kinetics I)		lytical Mechanics, Multibody Syste		Circuit Theory	UE 2			
22	_		Mechanics III VL	Mec	hanics IV	VL 3					
23			Mechanics III UE	Mec		UE 2					
24			Mechanics III HÜ	Mec	hanics IV	HÜ 1					
25	Mechanics I (Statics)	Mathematics II									
26	Mechanics I VL 2	Linear Algebra II VL 2									
27	Mechanics I UE 2	Linear Algebra II UE 1	Mechanical Engineering: Design (part 1)	Adv	anced Materials						
	Mechanics I HÜ 1	Linear Algebra II HÜ 1 Analysis II VL 2	Embodiment Design and 3D-CAD VL		anced Materials Characterization	VL 2					
28		Analysis II VL 2 Analysis II HÜ 1	Mechanical Design Project I TT			VL 2					
29		Analysis II UE 1		Adva	anced Materials Design	HÜ 2					
30			Fundamentals of Materials Science (part 1)								
31			Fundamentals of Materials Science I VL								
32	1		Physical and Chemical Basics of VL								
		Programming in C	Materials Science				1				
33											

34		Programming in C Programming in C	VL 1 PR 1	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
00				Advanced Mechanical Engineering HÜ 2
				Design I
	Nontechnical Complementary Courses	s for Bachelors (from catalogu	e) - 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.