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 Mechatronics Legend:

Core qualification Compulsory

Specialisation Compulsory

Focus Compulsory

Thesis Compulsory

Speci	alisation Mechanical En	gineeri	ng, Focus Mechatronic	S			Core qualification Elective Compulsory		cialisation Elective	Focus Elective Con	npulsory Interdis	ciplinary complement
LP	Semester 1	FormHrs/wk	Semester 2	FormHrs/wk	Semester 3	FormHrs/wk	Semester 4	FormHrs/w	Semester 5	FormHrs/wk	Semester 6	FormHrs/w
1	Physics for Engineers (part 1)		Electrical Engineering II: Alternating	Current	Technical Thermodynamics II		Mechanical Engineering: Design (part	t 2)	Introduction to Control System	ns	Foundations of Mana	gement
2	Physics for Engineers	VL 2	Networks and Basic Devices		Technical Thermodynamics II	VL 2		POL 2	Introduction to Control System		Introduction to Manag	
3	Physics for Engineers	UE 1	Electrical Engineering II: Alternating Current Networks and Basic Devices	VL 3	Technical Thermodynamics II	HÜ 1	Mechanical Design Project II	TT 3	Introduction to Control System	ns UE 2	Project Entrepreneurs	ship POL 2
			Electrical Engineering II: Alternating	UE 2	Technical Thermodynamics II	UE 1	En demontele of Materiale Opieron (r					
4			Current Networks and Basic Devices				Fundamentals of Materials Science (p Fundamentals of Materials Science II					
5	Chemistry						Fundamentals of Materials Science in	VL Z				
6	Chemistry I Chemistry II	VL 2 VL 2					Advanced Mechanical Engineering De	esign				
7	Chemistry I	HÜ 1	Fundamentals of Mechanical Engine	ering	Computer Engineering		(part 2)		Measurement Technology for	Mechanical and	Semiconductor Circu	lit Design
8	Chemistry II	HÜ 1	Design		Computer Engineering	VL 3	Advanced Mechanical Engineering Design II	VL 2	Process Engineers		Semiconductor Circu	it Design VL 3
			Fundamentals of Mechanical	VL 2	Computer Engineering	UE 1		HÜ 2	Measurement Technology for	. VL 2	Semiconductor Circu	it Design UE 1
			Engineering Design Fundamentals of Mechanical	HÜ 2			Design II		Mechanical and Process Eng Measurement Technology for	ineers HÜ 1		
9			Engineering Design	HU 2			Signals and Systems		Mechanical and Process Eng			
10							Signals and Systems	VL 3	Practical Course: Measureme	nt and PR 2		
11	Electrical Engineering I: Direct Curre						Signals and Systems	HÜ 1	Control Systems			
	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 System	ms and	Mathematics IV	
14	Electrical Engineering I: Direct Current	UE 2	Technical Thermodynamics I	VL 2	Analysis III	VL 2			Reliability Simulation of Dynamic System	ms VL 2	Complex Functions	VL 2
15	Networks and Electromagnetic Fields		Technical Thermodynamics I Technical Thermodynamics I	HÜ 1 UE 1	Analysis III Analysis III	UE 1 HÜ 1	Fluid Dynamics		Reliability of Dynamic System		Complex Functions Complex Functions	UE 1 HÜ 1
16			rechnicar menhodynamics i		Differential Equations 1	VL 2	Fluid Mechanics	VL 3	Simulation of Dynamic System		Differential Equations	
					Differential Equations 1	UE 1	Fluid Mechanics	HÜ 1	Reliability of Dynamic System	ns UE 1	Differential Equations	
17	Mathematics I Linear Algebra I	VL 2			Differential Equations 1	HÜ 1					Differential Equations	2 HÜ 1
18	Linear Algebra I	UE 1										
19	Linear Algebra I	HÜ 1	Mechanics II: Mechanics of Materials	<u> </u>					Electrical Engineering III: Cir	cuit Theory and	Bachelor Thesis	
20	Analysis I	VL 2	Mechanics II	VL 2					Transients			
21	Analysis I	UE 1	Mechanics II	UE 2 HÜ 2	Mechanics III (Hydrostatics, Kinema	tics,	Mechanics IV (Kinetics II, Oscillations	5,	Circuit Theory Circuit Theory	VL 3 UE 2		
22	Analysis I	HÜ 1	Mechanics II	HU 2	Kinetics I)		Analytical Mechanics, Multibody Syst		Circuit meory	UE 2		
					Mechanics III	VL 3	Mechanics IV	VL 3				
23					Mechanics III	UE 2	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								
27	Mechanics I	UE 2	Linear Algebra II	UE 1	Mechanical Engineering: Design (pa	rt 1)	Electrical Machines					
28	Mechanics I	HÜ 1	Linear Algebra II Analysis II	HÜ 1 VL 2	Embodiment Design and 3D-CAD	VL 2	Electrical Machines	VL 3				
			Analysis II	HÜ 1	Mechanical Design Project I	TT 3	Electrical Machines	HÜ 2				
29			Analysis II	UE 1								
30					Fundamentals of Materials Science (
31					Fundamentals of Materials Science I							
32					Physical and Chemical Basics of	VL 2						
33			Programming in C		Materials Science				1			

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.