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 Energy and Environmental Engineering

Legenc:

Core qualification Compulsory

Specialisation Compulsory

Focus Compulsory

Thesis Compulsory

Core qualification Elective

Specialisation Elective

Compulsory

Focus Elective Compulsory

Interdisciplinary complement

Compulsory

LP	Semester 1 Forth	rirs/wiemester 2	Formirs/wiemester 3	Formers	/wSemester 4	Formers	√wSkemester 5 FormHrs	/w&kemester 6 Formidirs	√wSkemester7 FormHrs/w
1 2 3 4 5	Chemistry Chemistry I VL 2 Chemistry II VL 2 Chemistry II HÜ 5 Chemistry II HÜ 6	Networks and Basic De Electrical Engineering II: Alternating Current	VL 3 Technical Technical Technical Thermodynamics II Technical Thermodynamics II Technical		Mechanical Engineerin Design (part 2) Team Project Design Methodology Mechanical Design Project II Fundamentals of Mater Science (part 2) Fundamentals of Materials Science II	PBL2	Introduction to Control Systems Introduction to Control VL 2 Systems Introduction to Control UE 2 Systems	Foundations of Management Introduction to VL 3 Management Management Tutorial HÜ 2	Advanced Internship GES
7	Electrical Engineering I: Direct Current Networks and Electromagnetic Fields Electrical Engineering I: VL 3 Direct Current Networks and Electromagnetic	Fundamentals of	anical Mathematics III Analysis III Analysis III Analysis III Differential Equations	VL 2 UE 1 HÜ 1	Fundamentals of Fluid Mechanics Fundamentals of Fluid Mechanics Fluid Mechanics for Process Engineering	VL 2 HÜ 2	Heat and Mass Transfer Heat and Mass Transfer VL 2 Heat and Mass Transfer UE 1 Heat and Mass Transfer HÜ 1	Thermal Separation Processes (part 2) Separation Processes PR 1 Environmental Technology (part 2)	
9 10 11	Fields Electrical Engineering I: UE 2 Direct Current Networks and Electromagnetic Fields	Mechanical Engineering	Differential Equations	UE 1				Practical Exercise PR 1 Environmental Technology Particle Technology and Solids Process Engineering	
12 13 14 15 16	Mathematics I Linear Algebra I Linear Algebra I Linear Algebra I HÜ	1 Thermodynamics I	whics I VL 2 Mechanics III (Hydro Kinematics, Kinetics		Electrical Machines Electrical Machines Electrical Machines	VL 3 HÜ 2	Thermal Separation Processes (part 1) Thermal Separation VL 2 Processes	Particle Technology I VL 2 Particle Technology I UE 1 Particle Technology I PR 2 Environmental Technology Environmental VL 2	
17	Analysis I UE Analysis I HÜ Analysis I HÜ	Thermodynamics I Technical Thermodynamics I	Mechanics III UE 1 Mechanics III Mechanics III	VL 3 UE 2 HÜ 1	Renewables and Energ	ıv	Thermal Separation UE 2 Processes Thermal Separation HÜ 1 Processes Gas and Steam Power Plants	Assessment Environmental UE 1 Assessment Informatics for Process	
19		Mechanics II: Mechanic Materials	cs of		Systems Renewable Energy	VL 2	Gas and Steam Power VL 3 Plants	Engineers Numeric and Matlab PR 2	Bachelor Thesis
21 22 23	Mechanics I (Statics) Mechanics I VL 2 Mechanics I UE 2 Mechanics I HÜ	2 Mechanics II	VL 2 Computer Engineering UE 2 Computer Engineering HÜ 2 Computer Engineering	VL 3	Energy Systems and Energy Industry Power Industry Renewable Energy	VL 2 VL 1 UE 1	Gas and Steam Power HÜ 2 Plants	Informatics for Process VL 2 Engineers Informatics for Process UE 2 Engineers	
24					l		Measurement Technology	I	

25 26 27 28 29 30 31	Programming in C Programming in C VL 1 Programming in C PR 1 Physics for Engineers (AIW) Physics for Engineers UL 2 Physics for Engineers UE 1	Linear Algebra II Linear Algebra II Analysis II Analysis II	/L 2 JE 1 HÜ 1 /L 2 HÜ 1 JE 1	Mechanical Engineering: Design (part 1) Embodiment Design and VL 2 3D-CAD Mechanical Design TT 3 Project I Fundamentals of Materials Science (part 1) Fundamentals of VL 2 Materials Science I	
32				Physical and Chemical VL 2	
33				Basics of Materials Science	
	Nontechnical Complementary Cou	irses for Bachelors (from ca	talogu	e) - 6LP	

for Mechanical and Process Engineers							
Measurement Technology for Mechanical and Process Engineers	VL	2					
Measurement Technology for Mechanical and Process Engineers	ΗÜ	1					
Practical Course: Measurement and Control Systems	PR	2					
Environmental Technology (part 1)							
Environmental Technologie	VL	2					

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The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.