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

Sample course plan - Bachelor General Engineering Science (German program) (AIWBS)
Specialisation Energy and Enviromental Engineering

Legend:

Core qualification Compulsory	Specialisation Compulsory	Focus Compulsory	Thesis Compulsory
Core qualification Elective Compulsory	Specialisation Elective Compulsory	Focus Elective Compulsory	Interdisciplinary complement

LP	Semester 1	Form	Hrs/wk	Semester 2	Form	Hrs/wk	Semester 3	Form	Hrs/wk	Semester 4	Form	Hrs/wk	Semester 5	Form	Hrs/wk	Semester 6	Form	Hrs/wk
1	**Physics for Engineers (part 1)**			**Electrical Engineering II: Alternating Current Networks and Basic Devices**			**Technical Thermodynamics II**			**Foundations of Management**			**Introduction to Control Systems**			**Thermal Separation Processes (part 2)**		
	Physics for Engineers	VL	2				Technical Thermodynamics II	VL	2	Introduction to Management	VL	4	Introduction to Control Systems	VL	2	Separation Processes	PR	1
2	Physics for Engineers	UE	1	Electrical Engineering II: Alternating	VL	3	Technical Thermodynamics II	HÜ	1	Project Entrepreneurship	POL	2	Introduction to Control Systems	UE	2	**Environmental Assessment and Environmental Technology (part 2)**		
3				Current Networks and Basic Devices			Technical Thermodynamics II	UE	1									
4				Electrical Engineering II: Alternating	UE	2										Environmental Assessment	VL	2
				Current Networks and Basic Devices												Environmental Assessment	UE	1
5	**Chemistry**															Practical Exercise Environmental	PR	1
	Chemistry I	VL	2													Technology		
6	Chemistry II	VL	2													**Fundamentals of Materials Science (part 2)**		
7	Chemistry I	HÜ	1	**Fundamentals of Mechanical Engineering Design**			**Computer Engineering**			**Mechanical Engineering: Design (part 2)**			**Heat and Mass Transfer**			Fundamentals of Materials Science II	VL	2
8	Chemistry II	HÜ	1				Computer Engineering	VL	3	Team Project Design Methodology	POL	2	Heat and Mass Transfer	VL	2	**Particle Technology and Solids Process Engineering**		
9				Fundamentals of Mechanical	VL	2	Computer Engineering	UE	1	Mechanical Design Project II	TT	3	Heat and Mass Transfer	UE	1			
10				Engineering Design												Particle Technology I	VL	2
				Fundamentals of Mechanical	HÜ	2				**Fundamentals of Fluid Mechanics**						Particle Technology I	UE	1
11	**Electrical Engineering I: Direct Current Networks and Electromagnetic Fields**			Engineering Design												Particle Technology I	PR	2
12										Fundamentals of Fluid Mechanics	VL	2						
13	Electrical Engineering I: Direct Current	VL	3							Exercises in Fluid Mechanics for	HÜ	1						
	Networks and Electromagnetic Fields			**Technical Thermodynamics I**			**Mathematics III**			Process Engineering			**Thermal Separation Processes (part 1)**					
14	Electrical Engineering I: Direct Current	UE	2	Technical Thermodynamics I	VL	2	Analysis III	VL	2				Thermal Separation Processes	VL	3	**Bachelor Thesis**		
15	Networks and Electromagnetic Fields			Technical Thermodynamics I	HÜ	1	Analysis III	UE	1				Thermal Separation Processes	UE	2			
16				Technical Thermodynamics I	UE	1	Analysis III	HÜ	1	**Electrical Machines**			Thermal Separation Processes	HÜ	1			
17	**Mathematics I**						Differential Equations 1	VL	2	Electrical Machines	VL	3						
18	Linear Algebra I	VL	2				Differential Equations 1	UE	1	Electrical Machines	HÜ	1						
19	Linear Algebra I	UE	1				Differential Equations 1	HÜ	1				**Gas and Steam Power Plants**					
20	Linear Algebra I	HÜ	1	**Mechanics II: Mechanics of Materials**									Gas and Steam Power Plants	VL	3			
21	Analysis I	VL	2	Mechanics II	VL	2							Gas and Steam Power Plants	HÜ	2			
	Analysis I	UE	1	Mechanics II	UE	2	**Mechanics III (Hydrostatics, Kinematics, Kinetics I)**											
22	Analysis I	HÜ	1	Mechanics II	HÜ	2	Mechanics III	VL	3	**Renewables and Energy Systems**								
23							Mechanics III	UE	2	Renewable Energy	VL	2						
24							Mechanics III	HÜ	1	Energy Systems and Energy Industry	VL	2	**Environmental Assessment and Environmental Technology (part 1)**					
25	**Mechanics I (Statics)**			**Mathematics II**						Power Industry	VL	1	Environmental Technologie	VL	2			
	Mechanics I	VL	2	Linear Algebra II	VL	2				Renewable Energy	UE	1	**Fundamentals of Materials Science (part 1)**					
26	Mechanics I	UE	2	Linear Algebra II	UE	1							Fundamentals of Materials Science I	VL	2			
27	Mechanics I	HÜ	1	Linear Algebra II	HÜ	1	**Mechanical Engineering: Design (part 1)**						Physical and Chemical Basics of	VL	2			
28				Analysis II	VL	2	Embodiment Design and 3D-CAD	VL	2				Materials Science					
				Analysis II	HÜ	1	Mechanical Design Project I	TT	3									
29				Analysis II	UE	1												
30							**Introduction into Energy and Environmental Engineering**						**Measurement Technology for Mechanical and Process Engineers**					
31							Introduction to Energy and	POL	4				Measurement Technology for	VL	2			
32							Environmental Engineering						Mechanical and Process Engineers					
							Physics Lab for VT/ BVT/ EUT	PR	2				Measurement Technology for	HÜ	1			

33		**Programming in C**			Physics-Lab for VT/ BVT/ EUT	PR	2	Measurement Technology for	HU	1
34		Programming in C	VL	1				Mechanical and Process Engineers		
		Programming in C	PR	1				Practical Course: Measurement and	PR	2
35		**Physics for Engineers (part 2)**						Control Systems		
36		Physics-Lab for ET/ AIW/ GES	PR	1						

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.