Course of Study General Engineering Science (German program, 7 semester) (Study Cohort w19)

Sample course plan - Bachelor General Engineering Science (German program, 7 semester) (AIWBS(7))

Specialisation: Energy and Enviromental Engineering

Semester 1	FormHrs/wk	Semester 2	FormHrs/wk	Semester 3	FormHrs/wk	Semester 4	FormHrs/wk	Semester 5	FormHrs/wk	Semester 6	FormHrs/wk	Semester 7	FormHrs/wk
Chemistry		**Electrical Engineering II: Alternating Current Networks and Basic Devices**		**Technical Thermodynamics II**		**Signals and Systems**		**Introduction to Control Systems**		**Foundations of Management**		**Advanced Internship AIW/ ES**	
Chemistry I	VL 2	Electrical Engineering II: Alternating Current Networks and Basic Devices	VL 3	Technical Thermodynamics II	VL 2	Signals and Systems	VL 3	Introduction to Control Systems	VL 2	Introduction to Management	VL 3	Advanced Internship AIW/ ES: Preparation	SE 1
Chemistry II	VL 2			Technical Thermodynamics II	HÜ 1	Signals and Systems	GÜ 2	Introduction to Control Systems	GÜ 2	Management Tutorial	GÜ 2	Advanced Intenship AIW/ ES: Internship-accompanying Seminar	SE 1
Chemistry I	HÜ 1	Electrical Engineering II: Alternating Current Networks and Basic Devices	GÜ 2	Technical Thermodynamics II	GÜ 1								
Chemistry II	HÜ 1												
Electrical Engineering I: Direct Current Networks and Electromagnetic Fields		**Fundamentals of Mechanical Engineering Design**		**Mathematics III**		**Fundamentals of Fluid Mechanics**		**Heat and Mass Transfer**		**Particle Technology and Solids Process Engineering**			
Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	VL 3	Fundamentals of Mechanical Engineering Design	VL 2	Analysis III	VL 2	Fundamentals of Fluid Mechanics	VL 2	Heat and Mass Transfer	VL 2	Particle Technology I	VL 2		
Electrical Engineering I: Direct Current Networks and Electromagnetic Fields	GÜ 2	Fundamentals of Mechanical Engineering Design	HÜ 2	Analysis III	GÜ 1	Fluid Mechanics for Process Engineering	HÜ 2	Heat and Mass Transfer	GÜ 1	Particle Technology I	GÜ 1		
				Analysis III	HÜ 1			Heat and Mass Transfer	HÜ 1	Particle Technology I	PR 2		
				Differential Equations 1	VL 2								
				Differential Equations 1	GÜ 1								
				Differential Equations 1	HÜ 1								
Mathematics I		**Technical Thermodynamics I**				**Electrical Machines and Actuators**		**Thermal Separation Processes**		**Environmental Technology (part 2)**			
Linear Algebra I	VL 2	Technical Thermodynamics I	VL 2			Electrical Machines and Actuators	VL 3	Thermal Separation Processes	VL 2	Practical Exercise Environmental Technology	PR 1		
Linear Algebra I	GÜ 1	Technical Thermodynamics I	HÜ 1			Electrical Machines and Actuators	HÜ 2	Thermal Separation Processes	GÜ 2				
Linear Algebra I	HÜ 1	Technical Thermodynamics I	GÜ 1					Thermal Separation Processes	HÜ 1				
Analysis I	VL 2			**Mechanics III (Dynamics)**				Separation Processes	PR 1				
Analysis I	GÜ 1			Mechanics III	VL 3								
Analysis I	HÜ 1			Mechanics III	GÜ 2								
				Mechanics III	HÜ 1								
		Mechanics II: Mechanics of Materials				**Renewables and Energy Systems**		**Computational Fluid Dynamics I**				**Bachelor Thesis**	
		Mechanics II	VL 2			Renewable Energy	VL 2	Computational Fluid Dynamics I	VL 2				
Mechanics I (Statics)		Mechanics II	GÜ 2			Energy Systems and Energy Industry	VL 2	Computational Fluid Dynamics I	HÜ 2				
Mechanics I	VL 2	Mechanics II	HÜ 2	**Computer Engineering**		Power Industry	VL 1						
Mechanics I	GÜ 2			Computer Engineering	VL 3	Renewable Energy	GÜ 1						
Mechanics I	HÜ 1			Computer Engineering	GÜ 1								
		Mathematics II				**Mechanical Engineering: Design (part 2)**		**Measurement Technology for Mechanical Engineers**					
		Linear Algebra II	VL 2			Team Project Design Methodology	PBL 2	Measurement Technology for Mechanical Engineering	VL 2				
Programming in C		Linear Algebra II	GÜ 1			Mechanical Design Project II	PBL 3						
Programming in C	VL 1	Linear Algebra II	HÜ 1	**Mechanical Engineering: Design (part 1)**				Measurement Technology for Mechanical Engineering	HÜ 1				
Programming in C	PR 1	Analysis II	VL 2	Embodiment Design and 3D-CAD	VL 2	**Fundamentals of Materials Science (part 2)**		Practical Course: Measurement and Control Systems	PR 2				
Physics for Engineers (AIW)		Analysis II	HÜ 1	Mechanical Design Project I	PBL 3	Fundamentals of Materials Science II	VL 2						
Physics for Engineers	VL 2	Analysis II	GÜ 1										
Physics for Engineers	GÜ 1			**Fundamentals of Materials Science (part 1)**				**Environmental Technology**					
				Fundamentals of Materials Science I	VL 2			Environmental Assessment	VL 2				
				Physical and Chemical Basics of Materials Science	VL 2			Environmental Assessment	GÜ 1				
								Environmental Technology (part 1)					
								Environmental Technologie	VL 2				

Non-technical 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.