Course of Study Energy and Environmental Engineering (Study Cohort w14)

Sample course plan - Bachelor Energy and Environmental Engineering (EUTBS)

Core qualification Elective
Compulsory
Compulsory
Compulsory
Core qualification Elective
Compulsory

LP	Semester 1	Forn	w&emester 2	Forn h lrs/	w&nester 3 FormHrs	w&semester 4 FormHrs	w&vemester 5 FormHrs	wSemester 6 FormHrs/w
1 2 3 4 5 6	Engineering Mechanics I Engineering Mechanics I Engineering Mechanics I	VL 2 UE 1 HÜ 1 VL 2 UE 1 HÜ 1	Engineering Mechanics II UE 2 Fundamentals of Mechanical Engineering Design Fundamentals of Mechanical VL 2 Engineering Design Fundamentals of Mechanical HÜ 2 Engineering Design	Mechanical Engineering: Design (part 1) Embodiment Design and 3D- VL 2 CAD Mechanical Design Project I TT 3 Basics of Electrical Engineering Basics of Electrical VL 3 Engineering	Fundamentals of Fluid Mechanics Fundamentals of Fluid VL 2 Mechanics Exercises in Fluid Mechanics HÜ 1 for Process Engineering	Heat and Mass Transfer Heat and Mass Transfer VL 2 Heat and Mass Transfer UE 1	Thermal Separation Processes (part 2) Separation Processes PR 1 Environmental Technology (part 2) Practical Exercise PR 1 Environmental Technology Renewables and Energy Systems Renewable Energy VL 2 Energy Systems and Energy VL 2 Industry	
7 8 9 10 11	Mathematics I Linear Algebra I Linear Algebra I Linear Algebra I Analysis I Analysis I Analysis I			VL 2	Basics of Electrical UE 2 Engineering Technical Thermodynamics II Technical Thermodynamics VL 2 II Technical Thermodynamics HÜ 1 II Technical Thermodynamics UE 1 II Mathematics III Analysis III VL 2	Electrical Machines Electrical Machines VL 3 Electrical Machines HÜ 2	Thermal Separation Processes (part 1) Thermal Separation VL 3 Processes Thermal Separation UE 2 Processes Thermal Separation HÜ 1 Processes	Power Industry Power Industry VL 1 Renewable Energy UE 1 Particle Technology and Solids Process Engineering Particle Technology I Particle Technology I UE 1 Particle Technology I PR 2
13 14 15 16 17	Fundamentals in Inorganic Chemistry Fundamentals in Inorganic Chemistry	VL 4 PR 3	Technical Thermodynamics I	echnical Thermodynamics I VL 2 echnical Thermodynamics I HÜ 1 echnical Thermodynamics I UE 1 eathermatics II near Algebra II VL 2 near Algebra II UE 1 near Algebra II HÜ 1 near Algebra II HÜ 1 near Algebra II HÜ 1 near Algebra II UE 1		Foundations of Management Introduction to Management VL 4 Project Entrepreneurship PBL 2	Gas and Steam Power Plants Gas and Steam Power VL 3 Plants Gas and Steam Power HÜ 2 Plants	Environmental Technology Environmental Assessment VL 2 Environmental Assessment UE 1
18 19 20 21 22 23 24 25 26 27	Fundamentals in Inorganic Chemistry Introduction into Energy Environmental Engineeri Introduction to Energy and Environmental Engineering Physics-Lab for VT/BVT/EUT-Engineers		Mathematics II Linear Algebra II Linear Algebra II Linear Algebra II Analysis II Analysis II Analysis II		Analysis III UE 1 Analysis III HÜ 1 Differential Equations 1 VL 2 Differential Equations 1 UE 1 Differential Equations 1 HÜ 1 Fundamentals of Materials Science (part 1) Fundamentals of Materials Science I	Informatics for Process Engineers Numeric and Matlab PR 2 Informatics for Process VL 2 Engineers Informatics for Process UE 2 Engineers Mechanical Engineering: Design (part 2) Team Project Design	Introduction to Control Systems Introduction to Control VL 2 Systems Introduction to Control UE 2 Systems Measurement Technology for Mechanical and Process Engineers Measurement Technology for VL 2	Bachelor Thesis
28 29			Organic Chemistry Organic Chemistry Organic Chemistry	VL 4 PR 3	Physical and Chemical VL 2 Basics of Materials Science	Team Project Design PBL 2 Methodology Mechanical Design Project II TT 3 Fundamentals of Materials	Mechanical and Process Engineers Measurement Technology for HÜ 1 Mechanical and Process Engineers	

	F	Fundamentals of Materials VL 2	Practical Course: PR 2 Measurement and Control Systems	
			Environmental Technology (part 1)	
			Environmental Technologie VL 2	
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.