Course of Study Energy and Environmental Engineering (Study Cohort w20)

Sample course plan E Master Energy and Environmental Engineering (EUTMS)
Specialisation Energy and Environmental Engineering, Specialisation Energy Engineering, Specialisation Environmental 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
1	**Transport Processes**			**Research Project Energy and Environmental Engineering**			**Electricity Generation from Wind and Hydro Power (part 2)**			**Master Thesis**		
	Heat & Mass Transfer in Process Engineering	VL	2				Sustainability Management	VL	2			
2	Multiphase Flows	VL	2				**Examples in Solid Process Engineering**					
3	Reactor Design Using Local Transport Processes	PBL	2				Fluidization Technology	VL	2			
4							Technical Applications of Particle Technology	VL	2			
5							Practical Course Fluidization Technology	PR	1			
6							Exercises in Fluidization Technology	GÜ	1			
7	**Fluid Mechanics in Process Engineering**											
8	Fluid Mechanics II	VL	2				**Bioenergy**					
9	Applications of Fluid Mechanics in Process Engineering	HÜ	2				Biofuels Process Technology	VL	1			
10							Biofuels Process Technology	GÜ	1			
11							Thermal Biomass Utilization	VL	2			
12							World Market for Commodities from Agriculture and Forestry	VL	1			
13	**Rural Development and Resources Oriented Sanitation for different Climate Zones**			**Electricity Generation from Wind and Hydro Power (part 1)**			Thermal Biomass Utilization	PR	1			
14	Rural Development and Resources Oriented Sanitation for different Climate Zones	VL	2	Wind Turbine Plants	VL	2						
15	Rural Development and Resources Oriented Sanitation for different Climate Zones	SE	2	Wind Energy Use - Focus Offshore	VL	1	**Waste Treatment Technologies**					
16				Hydro Power Use	VL	1	Biological Waste Treatment	PBL	3			
17							Waste and Environmental Chemistry	PR	2			
18				**System Aspects of Renewable Energies**								
19	**Steam Turbines in Energy, Environmental and Power Train Engineering**			Energy Trading	VL	1						
20	Steam turbines in energy, environmental and Power Train Engineering	VL	3	Energy Trading	GÜ	1						
21	Steam turbines in energy, environmental and Power Train Engineering	GÜ	1	Fuel Cells, Batteries, and Gas Storage: New Materials for Energy Production and Storage	VL	2						
22				Deep Geothermal Energy	VL	2						
23												
24				**Wastewater Systems**								
25	**Wastewater Treatment and Air Pollution Abatement**			Advanced Wastewater Treatment	VL	2						
26	Air Pollution Abatement	VL	2	Advanced Wastewater Treatment	HÜ	1						
27	Biological Wastewater Treatment	VL	2	Wastewater Systems - Collection, Treatment and Reuse	VL	2						
28				Wastewater Systems - Collection, Treatment and Reuse	HÜ	1						
29												
30												

Business & Management (from catalogue) - 6LP

Non-technical Courses for Master (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.