

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

Sample course plan F 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

Semester	Semester 1		Semester 2		Semester 3		Semester 4	
	Form	Hrs/wk	Form	Hrs/wk	Form	Hrs/wk	Form	Hrs/wk
1	Transport Processes		Research Project Energy and Environmental Engineering		Membrane Technology		Master Thesis	
2	Heat & Mass Transfer in Process Engineering VL 2				Membrane Technology VL 2			
3	Multiphase Flows VL 2				Membrane Technology GÜ 1			
4	Reactor Design Using Local Transport Processes PBL 2				Membrane Technology PR 1			
5								
6								
7	Fluid Mechanics in Process Engineering				Examples in Solid Process Engineering			
8	Fluid Mechanics II VL 2				Fluidization Technology VL 2			
9	Applications of Fluid Mechanics in Process Engineering HÜ 2				Technical Applications of Particle Technology VL 2			
10					Practical Course Fluidization Technology PR 1			
11					Exercises in Fluidization Technology GÜ 1			
12								
13	Thermal Energy Systems		Waste Treatment and Solid Matter Process Technology		Electrical Power Systems I: Introduction to Electrical Power Systems			
14	Thermal Energy Systems VL 3		Solid Matter Process Technology for Biomass VL 2		Electrical Power Systems I: Introduction to Electrical Power Systems VL 3			
15	Thermal Energy Systems HÜ 1		Thermal Waste Treatment VL 2		Electrical Power Systems I: Introduction to Electrical Power Systems GÜ 2			
16			Thermal Waste Treatment HÜ 1					
17								
18								
19	Environmental Protection and Management		System Aspects of Renewable Energies		Particle Technology and Solid Matter Process Technology			
20	Health, Safety and Environmental Management VL 2		Energy Trading VL 1		Advanced Particle Technology II VL 2			
21	Health, Safety and Environmental Management GÜ 1		Energy Trading GÜ 1		Advanced Particle Technology II PBL 1			
22	Integrated Pollution Control VL 2		Fuel Cells, Batteries, and Gas Storage: New Materials for Energy Production and Storage VL 2		Experimental Course Particle Technology PR 3			
23			Deep Geothermal Energy VL 2					
24								
25	Wastewater Treatment and Air Pollution Abatement							
26	Air Pollution Abatement VL 2							
27	Biological Wastewater Treatment VL 2							
28								
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.

