

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

Sample course plan D 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	<b>Transport Processes</b>		<b>Research Project Energy and Environmental Engineering</b>		<b>Examples in Solid Process Engineering</b>		<b>Master Thesis</b>	
2	Heat & Mass Transfer in Process Engineering VL 2				Fluidization Technology VL 2			
3	Multiphase Flows VL 2				Technical Applications of Particle Technology VL 2			
4	Reactor Design Using Local Transport Processes PBL 2				Practical Course Fluidization Technology PR 1			
5					Exercises in Fluidization Technology GÜ 1			
6								
7	<b>Fluid Mechanics in Process Engineering</b>				<b>Process Design Project</b>			
8	Fluid Mechanics II VL 2				Process Design Project PK 6			
9	Applications of Fluid Mechanics in Process Engineering HÜ 2							
10								
11								
12								
13	<b>Thermal Energy Systems</b>		<b>Use of Solar Energy</b>		<b>Particle Technology and Solid Matter Process Technology</b>			
14	Thermal Energy Systems VL 3		Solar Power Generation VL 2		Advanced Particle Technology II VL 2			
15	Thermal Energy Systems HÜ 1		Energy Meteorology VL 1		Advanced Particle Technology II PBL 1			
16			Energy Meteorology GÜ 1		Experimental Course Particle Technology PR 3			
17			Collector Technology VL 2					
18								
19	<b>Steam Turbines in Energy, Environmental and Power Train Engineering</b>		<b>System Aspects of Renewable Energies</b>					
20	Steam turbines in energy, environmental and Power Train Engineering VL 3		Energy Trading VL 1					
21	Steam turbines in energy, environmental and Power Train Engineering GÜ 1		Energy Trading GÜ 1					
22			Fuel Cells, Batteries, and Gas Storage: New Materials for Energy Production and Storage VL 2					
23			Deep Geothermal Energy VL 2					
24								
25	<b>Wastewater Treatment and Air Pollution Abatement</b>		<b>Wastewater Systems</b>					
26	Air Pollution Abatement VL 2		Advanced Wastewater Treatment VL 2					
27	Biological Wastewater Treatment VL 2		Advanced Wastewater Treatment HÜ 1					
28			Wastewater Systems - Collection, Treatment and Reuse VL 2					
29			Wastewater Systems - Collection, Treatment and Reuse HÜ 1					
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.

