Course of Study Renewable Energies (Study Cohort w18)

Sample course plan C Master Renewable Energies (REMS)
Specialisation Bioenergy Systems

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	**Fluid Mechanics and Ocean Energy**			**Dimensioning and Assessment of Renewable Energy Systems (part 2)**			**Thermal Engineering**			**Master Thesis**		
2	Fluid Mechanics II	VL	2	Heat Provision from Renewable Sources of Energy	SE	2	Thermal Engineering	VL	3			
	Energy from the Ocean	VL	2				Thermal Engineering	HÜ	1			
3				**Electricity Generation from Wind and Hydro Power**								
4				Wind Turbine Plants	VL	2						
5				Wind Energy Use - Focus Offshore	VL	1						
6				Hydro Power Use	VL	1						
7	**Electrical Power Systems I**			Renewable Energy Projects in Emerged Markets	PS	1	**Examples in Solid Process Engineering**					
8	Electrical Power Systems I	VL	3	**Use of Solar Energy**			Fluidization Technology	VL	2			
	Electrical Power Systems I	HÜ	2	Solar Power Generation	VL	2	Technical Applications of Particle Technology	VL	2			
9				Energy Meteorology	VL	1	Practical Course Fluidization Technology	PR	1			
10				Energy Meteorology	UE	1	Exercises in Fluidization Technology	UE	1			
11				Collector Technology	VL	2						
12				**System Aspects of Renewable Energies**			**Wastewater Treatment and Air Pollution Abatement**					
13	**Bioenergy**			Energy Trading	VL	1	Air Pollution Abatement	VL	2			
14	Biofuels Process Technology	VL	1	Energy Trading	UE	1	Biological Wastewater Treatment	VL	2			
15	Biofuels Process Technology	UE	1	Fuel Cells, Batteries, and Gas Storage: New Materials for Energy Production and Storage	VL	2						
16	Thermal Utilization of Biomass	VL	2	Deep Geothermal Energy	VL	2						
17	Thermal Utilization of Biomass	UE	1	**Modelling and technical design of bio refinery processes**								
18	World Market for Commodities from Agriculture and Forestry	VL	1	CAPE in Energy Engineering	PK	3						
19	**Energy Projects and their Assessment**			Biorefineries - Technical Design and Optimization	PBL	3						
20	Development of Renewable Energy Projects	VL	2									
21												
22	Economics of an Energy Provision from Renewables	VL	1	**Bioprocess and Biosystems Engineering**								
23				Bioreactor Design and Operation	VL	2						
24	Economics of an Energy Provision from Renewables	PS	1	Biosystems Engineering	VL	2						
	Sustainability Management	VL	2	Bioreactors and Biosystems Engineering	PBL	1						
25	**Dimensioning and Assessment of Renewable Energy Systems (part 1)**											
26												
27	Electricity Generation from Renewable Sources of Energy	SE	2									
28	Environmental Technology and Energy Economics	PBL	2									
29												
30												
31												

31		
32		

Business & Management (from catalogue) - 6LP
Nontechnical Elective Complementary 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.