Course of Study Renewable Energies (Study Cohort w16)

Sample course plan A 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			
9	Electrical Power Systems I	HÜ	2	Solar Power Generation	VL	2	Technical Applications of Particle Technology	VL	2			
10				Radiation and Optic	VL	1	Practical Course Fluidization Technology	PR	1			
11				Radiation and Optic	UE	1	Exercises in Fluidization Technology	UE	1			
12				Collector Technology	VL	2						
13	**Bioenergy**			**System Aspects of Renewable Energies**			**Wastewater Treatment and Air Pollution Abatement**					
14	Sustainable Mobility	VL	2	Energy Trading	VL	1	Air Pollution Abatement	VL	2			
15	Biofuels Process Technology	VL	1	Energy Trading	UE	1	Biological Wastewater Treatment	VL	2			
16	Biofuels Process Technology	UE	1	Fuel Cells, Batteries, and Gas Storage: New Materials for Energy Production and Storage	VL	2						
17	Thermal Utilization of Biomass	VL	2	Deep Geothermal Energy	VL	2						
18	World Market for Agricultural Commodities	VL	1									
19	**Energy Projects and their Assessment**			**Modeling and technical design of biorefinery processes**								
20	Development of Renewable Energy Projects	VL	2	CAPE in Energy Engineering	PK	2						
21	Economics of an Energy Provision from Renewables	VL	1	Biorefineries - Technical Design and Optimization	PBL	2						
22												
23	Economics of an Energy Provision from Renewables	PS	1									
24	Sustainability Management	VL	2									
25	**Dimensioning and Assessment of Renewable Energy Systems (part 1)**			**Waste and Energy**								
26				Waste Recycling Technologies	VL	2						
27				Waste Recycling Technologies	UE	1						
28	Electricity Generation from Renewable Sources of Energy	SE	2	Waste to Energy	PBL	2						
	Environmental Technology and Energy Economics	PBL	2									
29												
30												
31												
32												

Business & Management (from catalogue) 6 LP

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.