Course of Study Renewable Energies (Study Cohort w19)

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

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
1	**Fluid Mechanics and Ocean Energy**		
2	Fluid Mechanics II	VL	2
3	Energy from the Ocean	VL	2
4			
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6			
7	**Electrical Power Systems I: Introduction to Electrical Power Systems**		
8	Electrical Power Systems I: Introduction to Electrical Power Systems	VL	3
9	Electrical Power Systems I: Introduction to Electrical Power Systems	HÜ	2
10			
11			
12			
13	**Bioenergy**		
14	Biofuels Process Technology	VL	1
15	Biofuels Process Technology	GÜ	1
16	Thermal Utilization of Biomass	VL	2
17	Thermal Utilization of Biomass	GÜ	1
18	World Market for Commodities from Agriculture and Forestry	VL	1
19	**Energy Projects and their Assessment**		
20	Development of Renewable Energy Projects	VL	2
21	Economics of an Energy Provision from Renewables	VL	1
22	Economics of an Energy Provision from Renewables	PS	1
23	Sustainability Management	VL	2
24			
25	**Dimensioning and Assessment of Renewable Energy Systems (part 1)**		
26	Electricity Generation from Renewable Sources of Energy	SE	2
27	Environmental Technology and Energy Economics	PBL	2
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Semester 2	Form	Hrs/wk
Dimensioning and Assessment of Renewable Energy Systems (part 2)		
Heat Provision from Renewable Sources of Energy	SE	2
Electricity Generation from Wind and Hydro Power		
Wind Turbine Plants	VL	2
Wind Energy Use - Focus Offshore	VL	1
Hydro Power Use	VL	1
Renewable Energy Projects in Emerged Markets	PS	1
Use of Solar Energy		
Solar Power Generation	VL	2
Energy Meteorology	VL	1
Energy Meteorology	GÜ	1
Collector Technology	VL	2
System Aspects of Renewable Energies		
Energy Trading	VL	1
Energy Trading	GÜ	1
Fuel Cells, Batteries, and Gas Storage: New Materials for Energy Production and Storage	VL	2
Deep Geothermal Energy	VL	2
Modelling and technical design of bio refinery processes		
CAPE in Energy Engineering	PK	3
Biorefineries - Technical Design and Optimization	PBL	3
Waste Treatment and Solid Matter Process Technology		
Solid Matter Process Technology for Biomass	VL	2
Thermal Waste Treatment	VL	2
Thermal Waste Treatment	HÜ	1

Semester 3	Form	Hrs/wk
Thermal Energy Systems		
Thermal Engergy Systems	VL	3
Thermal Engergy Systems	HÜ	1
Examples in Solid Process Engineering		
Fluidization Technology	VL	2
Technical Applications of Particle Technology	VL	2
Practical Course Fluidization Technology	PR	1
Exercises in Fluidization Technology	GÜ	1
Wastewater Treatment and Air Pollution Abatement		
Air Pollution Abatement	VL	2
Biological Wastewater Treatment	VL	2

Semester 4	Form	Hrs/wk
Master Thesis		

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.