

Course of Study Renewable Energies (Study Cohort w17)

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

Legend:

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|--|------------------------------------|---------------------------|------------------------------|
| 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 | VL | 2 | Dimensioning and Assessment of Renewable Energy Systems (part 2) | SE | 2 | Thermal Engineering | VL | 3 | Master Thesis | | | | | | | | | | | | |
| 2 | | | | | | | | | | | Fluid Mechanics II | VL | 2 | Heat Provision from Renewable Sources of Energy | SE | 2 | Thermal Engineering | HÜ | 1 | | | |
| 3 | | | | | | | | | | | Energy from the Ocean | VL | 2 | Electricity Generation from Wind and Hydro Power | VL | 2 | Wind Turbine Plants | VL | 1 | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Electrical Power Systems I | HÜ | 2 | Renewable Energy Projects in Emerged Markets | PS | 1 | Examples in Solid Process Engineering | VL | 2 | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | Electrical Power Systems I | VL | 3 | Fluidization Technology | VL | 2 | | | | | | |
| 10 | | | | | | | | | | | Use of Solar Energy | VL | 2 | Technical Applications of Particle Technology | VL | 2 | | | | | | |
| 11 | | | | | | | | | | | | | | | | | Solar Power Generation | VL | 2 | Practical Course Fluidization Technology | PR | 1 |
| 12 | | | | | | | | | | | | | | | | | Energy Meteorology | VL | 1 | Exercises in Fluidization Technology | UE | 1 |
| 13 | | | | | | | | | | | | | | | | | Energy Meteorology | UE | 1 | Wastewater Treatment and Air Pollution Abatement | VL | 2 |
| 14 | Collector Technology | VL | 2 | Air Pollution Abatement | VL | 2 | | | | | | | | | | | | | | | | |
| 15 | System Aspects of Renewable Energies | VL | 1 | Biological Wastewater Treatment | VL | 2 | | | | | | | | | | | | | | | | |
| 16 | | | | | | | Biofuels Process Technology | UE | 1 | | Energy Trading | VL | 1 | | | | | | | | | |
| 17 | | | | | | | Biofuels Process Technology | UE | 1 | | Energy Trading | UE | 1 | | | | | | | | | |
| 18 | | | | | | | Thermal Utilization of Biomass | VL | 2 | | Fuel Cells, Batteries, and Gas Storage: New Materials for Energy Production and Storage | VL | 2 | | | | | | | | | |
| 19 | | | | | | | World Market for Agricultural Commodities | VL | 1 | | Deep Geothermal Energy | VL | 2 | | | | | | | | | |
| 20 | | | | | | | Energy Projects and their Assessment | VL | 2 | | Modelling and technical design of bio refinery processes | PK | 2 | | | | | | | | | |
| 21 | Development of Renewable Energy Projects | VL | 2 | Biorefineries - Technical Design and Optimization | PBL | 2 | | | | | | | | | | | | | | | | |
| 22 | Economics of an Energy Provision from Renewables | VL | 1 | | | | | | | | | | | | | | | | | | | |
| 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) | SE | 2 | | | | | | | | | | | Waste and Energy | VL | 2 | | | | | | |
| 26 | | | | Electricity Generation from Renewable Sources of Energy | PBL | 2 | Waste Recycling Technologies | UE | 1 | | | | | | | | | | | | | |
| 27 | | | | Environmental Technology and Energy Economics | PBL | 2 | Waste Recycling Technologies | UE | 1 | | | | | | | | | | | | | |
| 28 | | | | | | | Waste to Energy | PBL | 2 | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | | | | | |
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| 31 | | | | | | | | | | | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | | | | | | | | | | | |
| | Business & Management (from catalogue) - 6LP | | | | | | | | | | | | | | | | | | | | | |

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.