## **Course of Study Renewable Energies (Study Cohort w18)** Core qualification Compulsory

Sample course plan A Master Renewable Energies (REMS)

| Specia                | lisation Bioenergy Systems  |                      |   |                           |             | Core qualification Elective<br>Compulsory   | Specialisation E<br>Compulsory | lective | Focus Elective Compulsory | Interdisciplinary<br>complement |
|-----------------------|---|----------------------|---|---------------------------|-------------|---|--------------------------------|---------|---------------------------|---------------------------------|
| LP                    | Semester 1  | Form Hr              | s/wkSemester 2  | Form                      | Hrs/w       | vkSemester 3  | Form Hrs/w                     | kSemes  | ster 4                    | Form Hrs/wk                     |
| 1<br>2<br>3           | Fluid Mechanics and Ocean Energy<br>Fluid Mechanics II<br>Energy from the Ocean   | VL 2<br>VL 2         | Heat Provision from Denowable Courses   |                           |             | Thermal Engineering<br>Thermal Engineering<br>Thermal Engineering   | VL 3<br>HÜ 1                   | Maste   | er Thesis                 |                                 |
| 5<br>4<br>5<br>6<br>7 |   |                      | Electricity Generation from Wind an<br>Power<br>Wind Turbine Plants<br>Wind Energy Use - Focus Offshore | <b>d Hydı</b><br>VL<br>VL |             |   |                                |         |                           |                                 |
| 8                     | Electrical Power Systems I<br>Electrical Power Systems I<br>Electrical Power Systems I  | VL 3<br>HÜ 2         | Mad at a  | VL<br>PS                  | 1           | Examples in Solid Process Engineer<br>Fluidization Technology<br>Technical Applications of Particle<br>Technology | ing<br>VL 2<br>VL 2            |         |                           |                                 |
| 10<br>11<br>12        |   |                      | Use of Solar Energy<br>Solar Power Generation<br>Energy Meteorology                                     | VL<br>VL                  | 2<br>1      | Practical Course Fluidization Technology<br>Exercises in Fluidization Technology                                  | PR 1<br>UE 1                   |         |                           |                                 |
| 13<br>14<br>15<br>16  | <b>Bioenergy</b><br>Biofuels Process Technology<br>Biofuels Process Technology  | VL 1<br>UE 1         |   | UE<br>VL<br><b>jies</b>   | 1<br>2      | Wastewater Treatment and Air Pollu<br>Abatement<br>Air Pollution Abatement  | ution<br>VL 2                  |         |                           |                                 |
| 17<br>18              | Thermal Utilization of Biomass<br>Thermal Utilization of Biomass<br>World Market for Commodities from<br>Agriculture and Forestry | VL 2<br>UE 1<br>VL 1 | Energy Trading  | VL<br>UE<br>VL            | 1           | Biological Wastewater Treatment   | VL 2                           |         |                           |                                 |
| 19<br>20<br>21        | Energy Projects and their Assessmer<br>Development of Renewable Energy<br>Projects  | n <b>t</b><br>VL 2   | Storage<br>Deep Geothermal Energy<br>Modelling and technical design of b                                | VL                        |             |   |                                |         |                           |                                 |
| 22<br>23<br>24        | Economics of an Energy Provision from<br>Renewables<br>Economics of an Energy Provision from<br>Renewables                        | VL 1<br>PS 1         | processes<br>CAPE in Energy Engineering   | PK<br>PBL                 | 3           |   |                                |         |                           |                                 |
| 25<br>26              | Sustainability Management<br>Dimensioning and Assessment of Re<br>Energy Systems (part 1)   | VL 2<br>newable      | 2<br>   |                           |             |   |                                |         |                           |                                 |
| 27<br>28<br>29        | Electricity Generation from Renewable<br>Sources of Energy<br>Environmental Technology and Energy<br>Economics                    | SE 2<br>PBL 2        | Waste Recycling Technologies  | VL<br>UE<br>PBL           | 2<br>1<br>2 |   |                                |         |                           |                                 |
| 30                    |   |                      |   |                           |             |   |                                |         |                           |                                 |

Specialisation Compulsory Focus Compulsory

Thesis Compulsory

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.