### 1. Content and objectives

**Content:**
In the second semester, the students in this course should complete one scientific project, which runs over the entire semester. The topic of the project is a complex assignment out of renewable energy engineering. Subject are the design of a district energy system, combined heat and power facilities or the simulation of a power plant for example.

The project work is done in groups of 10 - 15 students and concludes with an oral presentation of the project results and a written project documentation. In order to take the system approach of renewable energies into account, at least two professors from different fields should offer and organize the project topic.

**Learning goals:**
The students should learn within a team to structure complex tasks, define reasonable work packages and to process them in a limited time. Periodical milestone discussions with the supervising lecturers help the project team and the individual student to complete the task in an efficient and goal-oriented manner.

The final documentation and presentation of the project results prepares the prospective Master of Engineering for a project-oriented work in industry and economy.

### 2. Method(s) of instruction

Project work

### 3. Requirements for attendance

Successful completion of the module 857 – „1st Scientific Project“

### 4. Usability of this module

The module is offered as mandatory module in the master study course „Renewable Energy Systems“ (M.Eng.)

### 5. Requirements for assessment

Assessment is performed with the submission and presentation of the project; both will be graded.

### 6. ECTS credits

10 ECTS credits

### 7. Frequency of offer

The module is annually lectured in the autumn semester

### 8. Work load

The total workload for this module is 300 hours; this corresponds to 10 ECTS credits. This workload results mainly from the independent and self-responsible handling of the project (220 hours), the participation in the milestone meetings (40 hours) as well as from the preparation of the final report and presentation (40 hours).

### 9. Duration of module

The module is lectured in one semester