



### **Information event**

## Anlagenprojektierung Cooperative Design Project Kooperative Projektarbeit

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- 1) Introduction to the module
- 2) Procedure of the module
- 3) Deliverables
- 4) Summary

Specific questions concerning the projects shall be discussed with the associated supervisor.

RES Regenerative Energiesysteme

### ТШП

CS0095 PA - Projektarbeit (B.Sc. TBR, Unerrichtssprache Deutsch)

Mandatory - Bachelor TBR (6) CS0135 DP - Design Project (M.Sc. CBT und TBR, Unterrichtssprache Englisch)

Mandatory - Master TBR (summer)

Elective

- Master CBT (summer)

What will you learn?

- Working in a group
- Project management
  - Basic engineering
- Detail engineering

WZ1942 AP - Anlagenprojektierung B.Sc. CBT, Unterrichtssprache Deutsch

Mandatory - Bachelor CBT (6)

### **Cooperative Design Project**

### Kooperative Projektarbeit

Master: TBR (elective in Master CBT) Credits: 5 ECTS Workload: 150 h Bachelor: TBR Credits: 8 ECTS Workload: 240 h

### **Teaching and learning methods:**

The module consists of a **project work**, which is carried out in a cooperative team between Bachelor and Master students. Depending on the given task, the **team size is 2 - 4 persons**. Progress and individual involvement are monitored in regular meetings with the supervisor.

### Learning Outcome:

After successful participation in the module, students will be able to

- organize and evaluate the cooperation in a team with heterogeneous knowledge,
- delegate tasks,
- apply the basics of process and energy technology to practical questions,
- design a project in terms of time management, balancing, interaction, objectives,
- analyze projects and to present them to outsiders,
- carry out works in a team



### Anlagenprojektierung

Bachelor: CBT Credits: 5 ECTS Workload: 150 h

### **Teaching and learning methods:**

The groups are tackled with a **design task** which can be solved by a correct information search and execution of sub-steps. The formulation of solution(s) is carried out in **groups consisting of 2 to 4 students**. The lecturers support this learning process by continuous interaction. Thereby the knowledge is intensified in supervised teamwork whereby the expertise is clearly strengthened.

### Learning Outcome:

After completion of the module the students know how to approach the planning of a technical assignment of tasks. They are able to acquire required information, to dimension the system in a correct way and examinate its profitability. So the students can design technical processes. Thereby the reference to real design is laid and the students are able to apply basic work steps.



### Group:

- find a group yourself
- groups of 4 students are recommended
- groups of students from the same study program are recommended

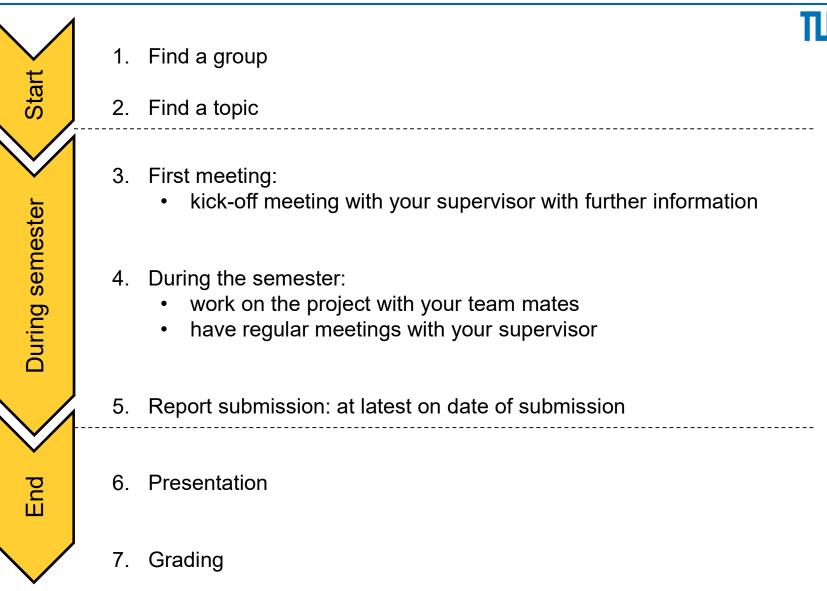
### <u>Topic:</u>

- supervised mainly by RES (Prof. Gaderer), CTV (Prof. Burger), ENT (Prof. Kainz), BVT (Prof. Zavrel) and Prof. Wenwen Fang (Professurship for Particle and Fibre Technology)
- find topics here: <u>https://syncandshare.lrz.de/open/MjRQckdYYjVXWWprQXBCSGZOQ2RY/WiSe2024</u> <u>25/PA\_DP\_AP\_Topics\_WS2024\_25.xlsx</u>
- contact the advisor of the topic regarding the availability and further information

### **Registration:**

- you cannot register yourself!
- we, the advisors, will arrange for registration; Matriculation numbers required

### Time Plan



### **Supervision and Material**

### Supervision agreement:

- start date
- date of submission (04.04.2025 – 23:59)
- title
- each group member signs
- supervisor signs

TUTI	RES Professorship of Regenerative Energy Systems
SUPERVISION AGREEME	NT
DP-Design Project CS0135 MSc CBT u	Ind TBR Englisch 5 ECTS X
issued on	
to be delivered until	
Title	
Supervisor:	
Group	Signature students
Name, first name	
Matriculation number	

#### Your supervisor:

- helps you with your tasks
- is involved in grading
- should be contacted with all your concerns
- is available in regular meetings

#### Material:

• Provided via moodle and Sync&Share (to be discussed with supervisor)



### ПП

RES Regenerative Energiesysteme



#### **Presentation:**

Presentation: 20 minutes Questions: 5-10 minutes

### Date of presenation: Tuesday, 2025-01-04, 09:00, Room U2?

### Please be present to listen also to your colleagues presentations.

#### Report:

Template is provided by the supervisor.

The template contains a preliminary outline for your report. However, you can always modify the structure of the outline.

The report is supposed to have a page count of around 40 - 60 pages.

Submission date: Friday, 2025-04-04, 23:59



The assessment is based on the report and the presentation and is not limited to the content but comprises also the work as a team.

### Criteria:

- Written and structural form of the project report
- Scientific form of the project report such as bibliography, literature references (read *TUM citation guide lines*)
- Quality of the own work, pictures, ...
- Communication with the supervisors
- Interim reports/conversations with supervisors
- Problem solving skills
- Communication within the group
- Time management of the group
- Presentation





# **Presentation of topics**

https://syncandshare.lrz.de/getlink /fiDhd7Ecd8ppM6n19r6wL8/PA\_D P\_AP\_Topics\_SS2024.xlsx

### **Summary**

- 1. Find a group yourself  $\rightarrow$  **JUST NOW**
- 2. Choose a topic
- 1. Get in contact with the named supervisor by the latest Friday, 2024-10-25
- 2. First meeting with supervision agreement
- 3. Supervisor arranges your registration
- 4. Work on the project and prepare a report
- 5. Submit your report
- 6. Presentation
- 7. Grading
- $\rightarrow$  get your credits (:





# Questions?