

COE-C2007 -PROJECT WORK PLAN AND SCHEDULE

The objective of the project work is to develop an intuitive understanding of thermodynamics and heat transfer by the real-world engineering examples. The students will use the basic principles of thermodynamics to analyse the energy related systems or specific units (e.g, heat engines, heat pumps, refrigerators).

The students do have **to form groups between 3 (min) to 5 (max) members** for the assignment (project).

Each group should either propose themselves a case study or **rely on one of the topics proposed by the instructors.**

Project grading (100 points) includes 50 points on the two presentations (week 10 and week 12) and 50 points on the final reports submitted (week 14).

Work schedule:

Week 9: Tuesday 25.2.2022 (No class)

We will upload the topics of the project work in Mycourses. The students can select their preferred topics and form groups.

Week 10: Tuesday 3.3.2022 (No class)

The deadline is set at 16:00 for the groups to register their members and submit a project registration file in MyCourses. The project registration report (2-3 pages only) includes:

- 1. The group members' names and project title.
- 2. A brief description of the topic of the project selected.
- 3. A block diagram showing: the main conversion steps and units modelled, the specified boundary conditions and the main assumptions in the case study.
- 4. A general project plan to explain how to complete your projects and the work tasks of your group members.
- 5. This is followed by a feedback and suggestions by the advisor working with them on the project.

Week 13 and 14: Consultation session with project advisors

Each group schedules a one hour consultation session in each week where they meet their designated project advisor to assist in any troubleshooting or questions related to their simulation project.

Week 14: Final Submission and Group Presentations (Microsoft Teams or Zoom)



COE-C2007- Thermodynamics and Heat Transfer (5 credit)

Each group would need to **submit the Final Reports by Friday 31.03.2022**. Each group will present their project work in a 15 minutes presentation attended by all groups on **Thursday 31.03.2022**, **12:00-14:00**. Each group should upload the presentation material via Mycourses portal before 12:00 o'clock the day of presentations.