# EEN-E3002 - COURSE REQUIREMENTS \& EVALUATION 

Instructors: Mika Järvinen (Responsible teacher), Ossi Kaario, Matthias Re, Judit Nyári, Dingyi Jiang, Qiang Cheng (Johnny)

Status of the Course: M.Sc. and Doctoral studies (level), Energy Technology, Advanced course.

## Student Workload:

| Learning activity | Hours <br> according to <br> schedule | Total workload <br> (hours) | Remarks |
| :--- | :---: | :---: | :--- |
| Activated lectures | $4 \times 1.5$ | 6 |  |
| Additional reading materials | $2 \times 4 \times 1.5$ | 10 | Preparing for the lectures |
| Learning Exercises within <br> exercise session |  | 20 | 6 hours learning exercises and 6 <br> consultation sessions |
| Learning Exercises self-study |  | 5 additional hours per <br> assignment (total 4 <br> assignments) |  |
| Project work consultations <br> (contact teaching) | $3 \times 1$ | 3 | Includes advisor consultation <br> sessions + presentations. |
| Project work group work |  | 40 | Student group work |
| Presentations | $2 \times 1.5$ | 3 | Pitch and final presentations |
| Report writing and presentation |  | 20 |  |
| Self-studying and reflection |  | 21 | 5 cr (27 each) |
| In total |  | $\mathbf{1 3 5}$ |  |

Grade Assessment: The grade for this course will be based on the amount of achieved points. You can achieve a maximum of 100 points and the points will be distributed as follows:

## Period IV

1. Presence in lectures: There are four lectures scheduled. No points for presence but highly recommended.
2. Learning exercise: There are four learning exercises; two for learning to use the Aspen Plus software and two for the GT-power software. You will have one week after each exercise to submit a solution via MyCourses, the four submissions will contribute 50\% to your grade (12.5 points each). An additional consultation session with the instructors is scheduled in the same week the specific learning exercise is given.

## Period V

Each student must join a group of 3-5 members and perform a simulation project on Aspen Plus® or GT power software. More instructions on the project tasks will be shared before the end of period IV. The project work grade accounts for $50 \%$ of the grade.

