MJ2409 Applied Energy Technology, Project Course 9.0 credits

Tillämpad energiteknik, projektkurs

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

Course syllabus for MJ2409 valid from Autumn 2007

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

Students enrolling in this course are normally in the 2nd semester of MSc studies (8th semester for Swedish MSc programs) and have taken courses like MJ2405 Sustainable Power Generation

MJ2407 Sustainable Energy Utilization

MJ2411 Renewable Energy Technology

or equivalent.

Co-requisites to this course include 4A1623 Applied Refrigeration and Heat Pump Technology OR 4A1626 Applied Heat and Power Technology OR 4A1627 Applied Reactor Technology and Nuclear Power Safety depending upon the desired specialization.

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

Upon successfully completing this course the student should be able to:

- Identify the key elements of a project team such that he/she can contribute in organizing a new group;
- Recognize the different phases of the project life cycle;
- Operate in a project team in various positions (e.g. task leader) and initiate administrative activities like running meetings, recording minutes, outlining action items, etc.;
- Collect and select background information via databases, correspondence with companies, etc;
- Structure a logical method of attack, break down a real-life engineering problem into manageable parts, and assimilate the results into a coherent form;
- Communicate the progress of a project to peers, instructors, and clients, both in oral and written forms;
- Apply knowledge learned in energy-related specialization courses (see co-requisites) in order to tackle a complex engineering problem.

Course contents

Block 1 Introduction and Common Lectures Course introduction, selection of topic Background information on group dynamics, project management and technical communication Block 2 Project Activities Organize and define project

Identify tasks

Acquire information, select methods Submit status reports periodically Oral presentations, both for client and for all course members Final report and presentation

Course literature

By agreement, according to the needs of the project.

Examination

- PRO1 - Project, 9.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

Other requirements for final grade

Students' performance will be assessed via participation in project meetings, oral presentations, and written reports. Students will also be asked to reflection on their experiences within the group and report their individual contributions towards the project. A grade of pass or fail will be assigned. A departmental examiner will be designated for each project.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.