MJ210X Degree Project in Energy Systems Analysis, Second Cycle 30.0 credits

Examensarbete i energiteknik, avancerad nivå

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

Establishment

Course syllabus for MJ210X valid from Autumn 2012

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

At least 240 ECTS completed in first or second cycles along with other prerequisites met for advancing to 5th year of study.

Language of instruction

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

Intended learning outcomes

Upon completion of the thesis project, the student should be able to:

• Formulate clear objectives that can be validated through appropriate scientific and/or engineering methods;

• Plan his/her own work appropriately to achieve the objectives;

• Assimilate related work in the field and link this to the task at hand;

• Employ a wide range of technical and non-technical tools and methods, either those that have been acquired previously or through learning new skills;

• If applicable, incorporate aspects related to sustainability, end-user or societal implications;

• Communicate results, in both oral and written form, with due respect to clarity, accuracy, and effectiveness;

• If applicable, critique a peer's technical work (oral or written) and be able to meet corresponding viewpoints on his/her own work

Course contents

MSc programs culminate in the degree (thesis) project, where students are expected to demonstrate independent mastery of a particular engineering problem employing a wide variety of skills. A variety of topics are appropriate for a thesis project, however the project must have significant technical components, have a clear link to energy systems analysis, and, if applicable, contribute to sustainable development. Provided that a thesis project meets these requirements, and under the condition that competent guidance/supervision is available to the student throughout the thesis project period, the project may be carried out either in an academic environment (university, research institute, or equivalent) or in an industrial setting (power plant, energy consulting agency, or other industry/business).

Examination

• XUPP - Degree Project, 30.0 credits, grading scale: A, B, C, D, E, FX, 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.

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

Other requirements for final grade

· XUPP - Examination Question, 30.0 credits, grade scale: A, B, C, D, E, FX, F

Written report (XUPP; 30hp)

Assessment:

• Oral presentation

• Written reports at 1/3, 2/3 and final phases (XUPP; 30hp).

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.