MJ2504 Integrated Project of the Year in Sustainable Energy 6.0 credits

Årets integrerade projekt i hållbar energi

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

Establishment

Course syllabus for MJ2504 valid from Autumn 2017

Grading scale

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

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

Year 2 TMESM(SELECT Master) students

Language of instruction

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

Intended learning outcomes

- Identify a “need” in sustainable energy development by making a thorough background study.
- Apply a system approach in analyzing the chain for energy conversion.
- Explore and identify potential innovative solutions to satisfy the “need”, by using effective energy engineering methodologies.
- Take charge and carry out an innovation process concerning problem solving in complex energy conversion chains through project-based working methods
- Conduct a business feasibility discussion on an advanced level for proposed innovations, addressing potential customers, the market as well as competitors.
- Write proposals in a complex context following EU standards.
- Communicate results in writing and orally to a number of actors of relevance to the project.
- Work in large multi-cultural project groups, making use of resources and experiences from all members in the team.
- Manage and report projects according to EU standards.

In summary this means that, after finalizing the project course MJ2504, the students have:

- Advanced their technical/engineering/scientific knowledge in a more specific area of sustainable energy.
- Advanced their experience to effectively working in large project groups, making use of resources and experiences from all members of their team.
- Advanced their knowledge in communicating their results in writing, as well as orally to a number of actors of relevance to their project.
- Advanced their capability in project management and project reporting, following EU standards.
- Advanced their understanding in the process of project proposals.
- Continue to practice the combined engineering analysis of product or services design combined with business feasibility discussions.

Course contents

Project work in sustainable energy conversion systems combined with innovation and entrepreneurship

Course literature

Varierad beroende på projektuppgiften

Varied, depending on the nature of the project

Examination

- PRO2 - Project work, 4.0 credits, grading scale: A, B, C, D, E, FX, F
- PRO1 - Project work, 2.0 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.

Written interim and final project report, oral presentation of the project results

Other requirements for final grade

- Project Work PRO1 - 2hp (Grade A-F)
- Project Work PRO2 - 4hp (Grade A-F)

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.