



Course syllabus

Projekt - energiteknik Project - Energy Technology

MVKN80, 7,5 credits, A (Second Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED M

Date of Decision: 2023-04-11

General Information

Elective for: M5

Language of instruction: The course will be given in English on demand

Aim

This course aims to provide the students knowledge to formulate, perform and report a project on an Energy Technology issue. The students should achieve skills in applying the knowledge from previous energy related courses on a relevant problem

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- be able to describe the relevance of the chosen problem
- be able to explain the basic concepts and important parameters of the problem
- be able to perform advanced analysis and synthesis of an energy related problem
- be able to describe the chosen method of analysis and explain its reliability
- be able to understand when analytical and empirical methods are applicable

Competences and skills

For a passing grade the student must

- be able to actively participate in discussions and negotiations concerning the chosen subject
- be able to in oral and written ways present the performed task and the results of the project

Judgement and approach

For a passing grade the student must

- be able to analyse an energy relevant problem and suggest a method for analysis
- be able to judge the reliability in the approach and the assumptions made
- be able to critically examine the chosen methods and results of analyses of energy technology problems

Contents

A practical/experimental or theoretical/numerical/analytical study within a subject the student likes to achieve a deeper knowledge. The course might be a pre-study for a Master of Science thesis or a deeper study related to a regular course or a Master thesis.

Examination details

Grading scale: TH - (U,3,4,5) - (Fail, Three, Four, Five)

Assessment: Written report and oral presentation.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Admission

Admission requirements:

- At least three (3) advanced courses in energy engineering or computational mechanics related subjects

The number of participants is limited to: No

Reading list

- Chosen specifically for every project in cooperation with supervisor and examiner.

Contact and other information

Examinator: Martin Andersson, martin.andersson@energy.lth.se

Examinator: Magnus Genrup, magnus.genrup@energy.lth.se

Course coordinator: Martin Andersson, martin.andersson@energy.lth.se

Course coordinator: Magnus Genrup, magnus.genrup@energy.lth.se

Course homepage: <https://www.energy.lth.se/english/education/>

Further information: The course is operated as a project with consultations and advices from the supervisor.