



# MJ2457 Security of Energy Supply 2: Threats and Innovation

## 6.0 credits

Säker energiförsörjning, del 2 - hot och innovation

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 MJ2457 valid from Autumn 2009

### Grading scale

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

### Education cycle

Second cycle

### Main field of study

### Specific prerequisites

B.Sc. degree in engineering or corresponding education

### 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:

- Describe the major energy conversion processes, their accompanying resource requirements, and impacts on environment having emphasis on exogenous threats.

Demonstrate clear understanding of the use of innovation theory in the process of creating a secure energy supply

Demonstrate clear understanding of the issues and processes related to crises management at company as well as at national level.

Conduct a major study assessing both antagonistic and non-antagonistic threats to a secure energy supply at a regional, national and global level

## Course contents

Lectures given by a variety of experts present the essential elements of a particular topic and also provide a framework for further in-depth study via a group project. Voluntary field trips in the Stockholm area.

## Course literature

Handouts distributed on the lectures

## Examination

- PRO1 - Project, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Examination, 3.0 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.

PRO1 - Project, 4.0 cr, grade scale: A, B, C, D, E, FX, F

TEN1 - Examination, 2.0 cr, grade scale: A, B, C, D, E, FX, F

## Other requirements for final grade

Project report (4 cr): Includes 2 – 5 -pages written report analyzing the threats, 1 - 2-page peer assessment of another student's report, and oral presentation of own report. One grade (A-F) assigned per individual.

Final exam (2 cr) Tests knowledge of subjects presented at lectures. One grade (A-F) assigned per individual.

Individual grades ranging from A-F will be assigned based on the weighted contribution of the above.

## **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.