MJ2477 Energy Policy and Planning 6.0 credits

Energipolitik och planering

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

Establishment

Course syllabus for MJ2477 valid from Autumn 2019

Grading scale

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

Education cycle

Second cycle

Main field of study

Environmental Engineering, Mechanical Engineering

Specific prerequisites

Entry requirements: 195 credits on engineering programmes of which 45 credits with a specialisation in Energy, Environment or the equivalent, or 45 credits from Master's programme (two year) with a specialisation in energy, environment or the equivalent, as well as the course MJ2413 Energy and Environment, or the equivalent, and documented knowledge in English B or the equivalent.

Language of instruction

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

Intended learning outcomes

After passing the course, the students should be able to:

1. Analyse and compare energy systems and political profiles in different countries

2. Evaluate synergies between the energy sector and other sectors, and its role in politics to deal with energy use and emissions in different sectors

3. Assess policies, their implementation and result by means of indicators

4. Suggest policies and measures for system transformation, and critically evaluate ways to implement them to promote a sustainable development

5. Explain perspectives and roles of different interested parties in the formulation and implementation of the energy policy

Course contents

The course gives understanding of energy policies and planning processes and analysis tools for supervision and assessment of energy policy effects. The students will learn about the strategic role that politics play for the design of energy systems. They will also examine the energy policy within the scope of other sectors, i.e. transport and built environment. The course gives a good basis for young engineers to understand energy policy and planning, to be able to act either as planners or as implementors of energy policies and projects.

The course is designed for engineers and Master students in their final year of education. Energy companies and markets are strongly influenced by the politics, which justifies the relevance of the course for students who aim for leading job in the industry and the consultancy companies. The course is of special interest for students who intend to work with public organisations, municipalities, public authorities and multilateral organisations. The course is very relevant for students who intend to do research in socio-technical topics.

Course literature

Kursen kommer att baseras på 1) Artiklar från böcker och vetenskapliga tidskrifter, 2) Material utdelat i samband med gästföreläsningar, 3) Fallstudier i form av material sammanställt av läraren

Examination

- SEM1 - Seminar, 1.0 credits, grading scale: P, F
- INL1 - Home Assignment, 1.0 credits, grading scale: A, B, C, D, E, FX, F
- PRO1 - Exam Task, 1.5 credits, grading scale: A, B, C, D, E, FX, F

- ÖVN1 - Exercise, 1.0 credits, grading scale: P, F
- TEN1 - Written exam, 1.5 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

Seminars and workshops are compulsory (ÖVN1, INL1, PRO1, SEM1, TEN1). In other respects, at least 75% attendance/participation is requiredfor passing the course.

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.