

Strategic Development of Sustainable Energy Systems

Programme course

6 credits

Strategisk utveckling av hållbara energisystem

TMES41

Valid from: 2017 Spring semester

Determined by

Board of Studies for Mechanical
Engineering and Design

Date determined

2017-01-25

Main field of study

Energy and Environmental Engineering

Course level

Second cycle

Advancement level

A1X

Course offered for

- Energy-Environment-Management

Entry requirements

Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

Prerequisites

Sustainable Energy Systems, Energy Conversion, Building Energy Systems, Industrial Energy Systems, Energy Systems Analysis

Intended learning outcomes

The overall aim is to increase skills for modeling regional energy from sustainable perspective. After the course students should:

- have knowledge of various national and international scenarios for the energy system's composition in 2050 and its impact on the climate
- have knowledge of methods for energy planning
- have knowledge of the interplay between energy supply and energy use in the sectors buildings, transportation and industries.
- have knowledge of various methods and tools for strategic planning of sustainable regional energy systems

Course content

National and international scenarios for the energy system's composition in 2050, regional energy system planning from a social science perspective

Teaching and working methods

Lectures, seminars and project work.

Examination

UPG1	Individual assignment	2 credits	U, 3, 4, 5
PRA1	Project assignment	4 credits	U, 3, 4, 5

Grades

Four-grade scale, LiU, U, 3, 4, 5

Other information

Supplementary courses: International Energy Market, Project Course - Energy and Environmental Engineering, Energy Policy Instruments

Department

Institutionen för ekonomisk och industriell utveckling

Director of Studies or equivalent

Shahnaz Amiri

Examiner

Louise Trygg

Course website and other links

Education components

Preliminary scheduled hours: 30 h

Recommended self-study hours: 130 h

Course literature

Robèrt, Broman et al, "Sustainability Handbook", Studentlitteratur 2012 Skrifter från Energisystem

Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at http://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.