

# AF106V Buildings Energy Performance 2, - Evaluation 7.5 credits

Byggnaders energianvändning 2, - beräkning och deklaration

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

#### **Establishment**

Course syllabus for AF106V valid from Spring 2012

## **Grading scale**

P, F

## **Education cycle**

First cycle

### Main field of study

**Technology** 

## Specific prerequisites

Having started the course " - Buildings Energy Performance 1 - AF105V-" or the equivalent competence from an engineering education, for example, 7.5 credits in building technology.

## Language of instruction

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

#### Intended learning outcomes

After completing the course students should have the skills needed to assess and describe a building's energy performance and for making and reviewing energy declarations of buildings.

#### Course contents

The course will provide an understanding of how the energy consumption should be interpreted. What is meant by energy performance and the energy quality can be managed with exergy as an aspect. It also contains;

Data for energy use electricity, oil, wood, etc. The conversion of energy consumption to a normal year - what is it and how does it work? Statistics for energy use. Simulation of energy use. Standard values for household energy consumption, etc. Building envelope - assessment and finding weaknesses. Energy saving measures on building service systems. Energy consumption in bilding regulations. Assessment of heat pump installations. Assessment of the profitability of energy saving measures. Training on how to make energy certificates.

### Disposition

The course will be given as classes, seminars and a project task

#### Course literature

A number of documents and reports as the basis for implementing the EU Energy Directive in Sweden

#### **Examination**

- TEN1 Examination, 4.5 credits, grading scale: P, F
- LAB1 Laboratory Work, 3.0 credits, grading scale: P, 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.

Project work and exam must be approved in order to pass the course

# Other requirements for final grade

Project work and exam must be approved in order to pass 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.