



HS1013 Building Services and Energy 7.5 credits

Installationsteknik och energi

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

Establishment

Course syllabus for HS1013 valid from Autumn 2007

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Knowledge equivalent to the courses:

HS1002 Building Physics

HS1007 Fluid Mechanics

Language of instruction

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

Intended learning outcomes

After completing this course the student is familiar with:

- Design routines in heating, ventilation and sanitation
- Healthy and energy efficient indoor climate solutions
- Safety aspects in building services design

Course contents

Both theoretical and practical design aspects are considered, and modern design tools are included.

the following parts are included:

- Indoor climate requirements
- Thermal considerations including heat transfer and heat recovery
- Moisture and the Mollier chart
- Energy conservation in buildings
- Heat pumps and solar energy
- Space heating and ventilation system design
- Air conditioning, sanitation, and electrical installations

Course literature

Warfvinge, C: Installationsteknik för V, LTH, Lund

Some additional booklets are also used. Everything is available in the local book shop at Campus Haninge.

Examination

- PRO1 - Project, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Examination, 6.0 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.

If the course is discontinued, students may request to be examined during the following two academic years.

Other requirements for final grade

Written exam (TEN1; 6 cr.).

Approved project assignment (PRO1; 1.5 cr.).

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.