AF1501 Building Services Engineering, Basic Course 7.5 credits

Installationsteknik, grundkurs

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

Establishment

Course syllabus for AF1501 valid from Autumn 2007

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Building Materials and Building Physics

Language of instruction

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

Intended learning outcomes

The course will give knowledge about the fundamental conditions for good function of the installations and knowledge about simple systems and components for heating, ventilation, electricity and sanitary installations.

Course contents

Needs and comfort for the human. Indoor climate.

Performance requirements.

Heat exchangers. Convective heat transfer. Heat and mass transfer.

Moist air.

Heating systems. Pipe systems. Heaters. Heat balance of rooms.

Ventilation systems. Air exchange. Duct systems. Function of supply and extract air systems.

Electrical systems. Distribution, safety and planning. Electricity at the construction site. Electrical motors. Installations for telecommunication

Sanitary systems.

Acoustics in building services engineering.

Tunnel ventilation

Course literature

Compendiums in Building Services Engineering. In Swedish.

The literature might be completed during the course.

Examination

- ÖVN1 - Exercises, 3.0 credits, grading scale: P, F
- TEN1 - Examination, 4.5 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

Examination (TEN1; 4,5 cr)
Exercises (ÖVN1; 3 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.