



HS1735 Project Building and Installations 7.5 credits

Projekt hus och installationer

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

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

Establishment

Course syllabus for HS1735 valid from Spring 2011

Grading scale

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

Education cycle

First cycle

Main field of study

Built Environment, Technology

Specific prerequisites

Knowledge equivalent to HS1730 Building Physics and Building Materials

Language of instruction

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

Intended learning outcomes

Upon completion of the course, the student shall be able to:

- Participate in planning of building fixtures and fittings
- Choose fixtures and fittings for a good, energy-efficient indoor environment
- Manage electrical safety in buildings
- Lead coordination between various parties in the construction process
- Identify and eliminate critical risks in a construction project

Course contents

This course contains theoretical and practical training in technical installations for buildings, principles of their design, and calculation aids. In the course project, heating and air treatment systems are dimensioned for a building, and a heat pump solution is also covered.

This course covers:

- Indoor climate and thermal comfort
- Heating of buildings, heat transfer and heat recovery
- Mollier diagram for humid air
- Heat pumps and solar collectors
- Comfort cooling
- Frequently used air treatment systems.
- Water and sewage systems in common use
- Control and regulation systems
- Electric installations and electrical safety
- Planning and installation phases
- Tendering of installation contractors
- Interpretation of drawings, installation drawings
- Commissioning, performance inspection, verification inspection and installation hand-over
- Laws and regulations that affect installations
- Organising the coordination of installations

Course literature

Warfvinge, C: Installationsteknik för V, LTH, Lund

Examination

- PRO1 - Project, 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.

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.