AF1007 Building Technology 7.5 credits

Husbyggnadsteknik

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

Establishment

The syllabus applies from VT2025According to decision with Diary number: A-2024-2018, KS code: 3.2.2, date: 2024-09-26

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

General entry requirements for higher education

Language of instruction

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

Intended learning outcomes

On completion of the course, the student should be able to:

Knowledge and understanding

1. Describe different design solutions in house construction.

2. Describe common building materials in terms of structure, function and use in buildings.

3. Provide proposals for the reconstruction of existing buildings.

4. Interpret and explain building-related drawings.

5. Interpret and explain the content of energy certificate.

6. Carry out area calculations according to the current standard for measurement of buildings.

7. Describe and explain the process of climate labelling of buildings.

Skills and abilities

8. Explain the key elements of the laws and regulations governing the construction industry and urban planning.

9. Explain the causes of common building damages and describe how the risk of these can be minimized.

10. Describe heating systems, ventilation systems, and sanitation systems for buildings.

11. Explain the differences and similarities between different types of inspection, such as transfer inspection and construction inspection.

12. Carry out an inspection of an existing building based on course objectives 1-10.

Evaluation skills and approach

13. To reflect on the ethics and responsibilities of inspection of building.

Course contents

The course aims to provide the expertise in building technology requested by the Swedish Estate Agents Inspectorate, FMI.

The main contents of the course are:

- Inspection techniques
- Building regulations
- Building technology

- Building damages
- Energy certificates and climate declarations.
- Ethics and responsibility in building technical inspection.
- Reconstruction
- Drawings and area calculation

Examination

- INL1 - Assignment, 3.0 credits, grading scale: P, F
- TENA - 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

Written exam (TEN1; 4,5hp) and Assignment; (INL1; 3.0hp)

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.