



AF1745 Building Techniques, Detached Housing Project 10.0 credits

Byggteknik, småhusprojektering

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

Establishment

The official course syllabus is valid from spring semester 2027 as decided by the Director of First and Second Cycle Education. Decision date: 2026-10-06.

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Intended learning outcomes

After passing the course, the students should be able to:

- describe building construction for a small building
- explain the correlation between house building technology and society's sustainability goals
- describe rock and soil types in Sweden
- calculate the total water demand and the runoff of waste and storm water for a real estate unit
- plan and project a villa with specified dimensions for construction and building services equipment using suitable software.

Course contents

- House building technology for smaller buildings.
- Sustainable building techniques.
- Water demand for a real estate unit.
- The formation, structure, composition and classification of soil types.
- Building services techniques.
- Project planning with CAD.
- Project task "Villa".
- Sustainability in the design and planning of single-family homes, with a focus on material selection, energy and resource efficiency, and long-term functional solutions.

Examination

- PROA - Project assignment, 5.0 credits, grading scale: P, F
- TENA - Written exam, 5.0 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.

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.

Additional regulations

Replaces AF1738 from academic year 21/22.