

HS1724 Civil Engineering 7.5 credits

Anläggningsteknik

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

Establishment

Course syllabus for HS1724 valid from Spring 2011

Grading scale

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

Education cycle

First cycle

Main field of study

The Built Environment, Technology

Specific prerequisites

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, students will be able to:

- Describe types of minerals, rocks and soils in Sweden
- Understand the geotechnical properties of various soil materials and their function in relation to foundation work on buildings and structures
- Display basic knowledge of ground water
- Describe the different types of foundation practices for construction works
- Understand the conditions necessary for the most common types of ground and construction work
- Describe the design and building materials of a road structure
- Display knowledge of local disposal of surface water
- Demonstrate knowledge of ground planning, surface finishing, and land levelling

Course contents

- Sweden's geology, types of minerals and rocks, geo-technical properties of soil and rock, ground water, foundation engineering, geo-technical studies.
- Excavation, fill, ground reinforcement, superstructures and height subsidence of vegetation and paved surfaces, coatings.
- Design, strength and classification of road structures.

Course literature

Tommas Johansson, Statik och hålf

Sven Henrik, Bygg ekonomi och kvalitet

Projekthus och installationer

Examination

- ÖVN1 Assignments, 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

Written examination (TEN1, 4.5 credits), grading scale A-F Project work (PRO1, 3 credits), grading scale P/F

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.