



AE2401 Engineering Geology 7.5 credits

Teknisk geologi

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 AE2401 valid from Autumn 2007

Grading scale

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

Education cycle

Second cycle

Main field of study

Built Environment

Specific prerequisites

Bachelor degree and

AE1101(1M1201) Theory of Natural Resources;
AE1102(1M 1202) Geology and geotechnology;
(1L1601) Geotechnology and foundations; and AE1602 (1M1302) Hydrology; or similar courses.

Language of instruction

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

Intended learning outcomes

The aim of the course is to increase student's awareness and understanding of geological investigation methods, geological materials and their behaviour, and structural geology. Another aim is to increase the student's written and oral presentation-skills.

Course contents

Lectures include:

- investigation methods
- structural geology
- rock types physical properties
- rock properties for use as aggregates
- effects of weathering of rocks
- properties of discontinuities.

The exercises primarily deal with structural geology; prediction of subsurface geology.

The project work will focus on the geological aspects of developing an ecological village.

A three-day field trip, mandatory.

The students will give both an oral and written presentation of their project work.

Course literature

Goodman, R, 1993, Engineering geology, 412 p.

Examination

- FÄL1 - Exkursion, 1.5 credits, grading scale: P, F
- PRO1 - Project, 2.2 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Examination, 2.3 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN1 - Assignments, 1.5 credits, grading scale: P, 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.

Other requirements for final grade

Project work (PRO1; 2.25 cr)

Written examination (TEN1; 2.25 cr)

Field trip (FÄL1; 2 cr)

Assignments (ÖVN1; 2 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.