FAF3603 Information Based Design in Soil and Rock Mechanics 7.5 credits

Informationsbaserad design för konstruktioner i jord och berg

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 FAF3603 valid from Spring 2017

Grading scale

undefined

Education cycle

Third cycle

Specific prerequisites

Master of Science in civil engineering or similar, with at least one basic course in geotechnical engineering or rock mechanics.

Language of instruction

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

Intended learning outcomes

After the course, the student shall:

- Have a deep understanding of how structures in soil and rock can be designed from an information-based perspective.
- Be able to discuss how decisions regarding structural design can be seen from a broader risk and life-cycle perspective.

Course contents

The course aims to give the student a deep understanding of how to view decisions regarding structural design in soil and rock, if the structure is to satisfy the society's requirements on structural safety and, at the same time, is possible to construct cost-effectively, when the complete life cycle of the structure is considered.The course consists of self studies, which are complemented by seminars. The course examination consists of a project assignment, which is selected in consultation with the examiner.

Course literature

The course literature is announced at the beginning of each course round

Examination

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.

- Written project report

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.