



FAE3008 Land and Water Resources Engineering - Problems and Methods 4.5 credits

Mark- och vattentekniska problemställning och metoderi

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

Establishment

Course syllabus for FAE3008 valid from Spring 2019

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

Accepted into a dr program at KTH.

Language of instruction

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

Intended learning outcomes

After completion of the course the student's shall have:

- Broadened their insight into different disciplines within the department of Land and Water Resources Engineering;
- Been inspire to cooperation more in depth with students from different disciplines;
- Knowledge of the research facilities available in our department and the different methodologies and materials used by the different disciplines;
- Experienced of working on multidisciplinary subjects with researchers from different fields;
- Better understanding of how their individual research project is relevant to needs of the society;
- Increased their contact net and have contacts with people in industry, society in general, who can benefit from the results of the research done by the student;
- Increased oral and written presentation skills.

Course contents

This course entails study of an actual case (or comparison of two or more cases) and a visit to the case (s) in question*. The case should focus on several specific engineering and or environmental problems which are related to the disciplines at the department of Land and Water Resources Engineering.

Details concerning the content of the course are described in the course PM. The content and examination of the course can vary in nature depending on whether the student is normally present at KTH or if they are working in the industry or living in another country for periods of their study. Since not all students work daily at KTH the content of the course must be flexible but the course goals are the same and must be met; these can be met in various ways.

The course is given for small groups of students, course event cluster groups, which normally consists of between 3 and 7 students. The study director along with the advisers to the students in the cluster are responsible for giving input to the students and guide their choice of a suitable case to study. The students are to define the scope of the case study (together with their advisers), plan and research the case in advance, carry out the field study/field trip and write a report which documents the case study work.

*Unless there are special circumstances that make this impossible.

Course literature

Litteratur för kursen varierar och beror på fallstudien som valts för kursen.

Examination

- INL1 - Homework, 4.5 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.

If the course is discontinued, students may request to be examined during the following two academic years.

The examination consists of a written and oral documentation of the case study. This is described in detail in the course PM. In general the students are to write a report that documents the work done: research done prior to the field trip, planning and carrying out of the field or case study, presentation of the specific field or case study in written format and oral presentation of the study *(seminar or video documentation). Furthermore the report should include a written evaluation of the learning outcomes where the students own research is put into context of the case study and discussion of achievement of the aims as well as documentation of the time spent on the different parts of the course.

In order to receive 4.5 ECTS the student must have documented that they have spent 120 hours work on the course.

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.