



AE2505 Water Systems and Geographic Information 7.5 credits

Vattensystem och geografisk information

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 AE2505 valid from Autumn 2007

Grading scale

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

Education cycle

Second cycle

Main field of study

Specific prerequisites

At least three years of academic studies in an engineering, planning or ecological program. Courses AE2608 "Engineering Hydrology and Climate" and AE2706 "Integrated Water Resources Management", or equivalent.

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 students should be able to:

1. Provide decision support by using GIS-based expert and decision support systems for solving spatial water related problems
2. Communicate environmental information through knowledge and skills in using planning related concepts and report writing.

Course contents

- Geographic information systems
- Tools and techniques for decision support concerning water systems
- Expert systems, decision support systems, spatial hydrological models, multi-criteria analysis
- Communication and dissemination of environmental information
- Indicators, scenarios, internet dissemination
- Planning and management of water systems, watersheds, EU water framework directive

Course literature

To be announced on the course webpage before course start.

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.

Other requirements for final grade

Written examination (TEN1; 4 cr)

GIS laborations and report writing (ÖVN1; 3.5 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.