



# AE271V Environmental Monitoring of Groundwater 7.5 credits

Miljöövervakning av grundvatten

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

## Establishment

Course syllabus for AE271V valid from Autumn 2012

## Grading scale

P, F

## Education cycle

Second cycle

## Main field of study

Environmental Engineering, The Built Environment

## Specific prerequisites

120 credits in academic studies in Engineering, Urban/Regional Planning or Natural Science and documented proficiency in English A and Swedish B or equivalent.

## 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 discuss the latest developments regarding theoretical and practical issues related to ground water monitoring, while referring to international and Swedish experiences in an European context. After completing the course the students will be equipped to:

- Describe on a general basis the content and objectives of the Water Framework Directive and more detail give an account of the "Ground Water Directive".
- Describe the Swedish Environmental Objectives related to the importance of ground water in society.
- Describe the Swedish priorities and work being done for the protection and sustainable use of the ground water resources.
- Describe and design different systems and methods for ground water monitoring.

## Course contents

The starting point for the course (part one) is the EU Water Framework Directive and Swedish environmental objectives and norms as well as methods for evaluation, strategic and policy issues and legislation. Part two focuses on characterisation of ground water, methodology issues, sampling technology, field and data analysis etc.

## Disposition

The course is an evening course and partly a distant course. In the course both internal and external lecturers will participate. It ends with one day/evening of presentations.

## Course literature

Kurslitteraturen anslås på kursens hemsida innan kursstart.

## Equipment

Standard computer equipment and access to internet.

## Examination

- SEM1 - Seminar, 1.5 credits, grading scale: P, F
- PRO1 - Project, 4.5 credits, grading scale: P, F
- ANN1 - Attendance, 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.

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

## **Other requirements for final grade**

Project report and presentation of the report at a seminar and active participation in discussions and exercises/activities.

## **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.