



AE1602 Hydrology 7.5 credits

Hydrologi

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 AE1602 valid from Autumn 2007

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Geology and Geotechnical Engineering besides Fluid Mechanics for Built Environment

Language of instruction

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

Intended learning outcomes

The course presents the processes in the hydrological cycle, gives computational ability and knowledge about field methods

Course contents

The hydrological cycle

Atmospheric water

Subsurface water: infiltration, recharge, unsaturated and saturated flow. Test pumping.

Groundwater prospecting and supply. Surface water: streamflow hydrographs, direct runoff, the unit hydrograph

Hydrologic statistics, frequency analysis, hydrologic design

Course literature

- Knutsso och Morfeldt: Grundvatten , teori & tillämpning, AB svensk Byggtjänst (2002)
- Kompendium i hydrologi (2008), tillhandahålls av institutionen

Examination

- TEN1 - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN1 - Exercises, 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.

Other requirements for final grade

Approved written examination (TEN1; 4,5 cr) and approved assignments (ÖVN1; 1,5 cr and ÖVN2; 1,5 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.