FAF3802 Hydrology for Hydropower Purposes 2.0 credits

Hydrologi för vattenkraftändamål

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

Establishment

Course syllabus for FAF3802 valid from Spring 2017

Grading scale

G

Education cycle

Third cycle

Specific prerequisites

Master degree in engineering or equivalent.

Language of instruction

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

Intended learning outcomes

To give a physical and mathematical knowledge of transport processes in hydrology and its application to sustainable water resources engineering for runoff processes, especially rivers.

The participant shall develop an understanding of hydromechanical principles used in runoff analyses and river regulation as well as application of runoff models discharge predictions.

Course contents

Basic transport equations for mass and momentum in surface water using differential as well as integral (compartmental) formulations. Runoff processes and river flows. Measuring techniques for surface water flows.

The course is based on lectures on the following themes:

- Basic mathematical principles
- Runoff processes
- Measuring techniques

Course literature

The course literature is decided before each course round. The literature is announced in the course program.

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.

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

Examination consists of assignments that are reported individually in a written form.

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.