EG2031 Power System Analysis, part 2 7.5 credits

Analys av elkraftsystem, del 2

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 EG2031 valid from Autumn 2011

Grading scale

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

Education cycle

Second cycle

Main field of study

Electrical Engineering

Specific prerequisites

EG2021 Power System Analysis Part 1 (or equivalent), courses in automatic control (6 HEC), also documented proficiency in English B or equivalent.

Language of instruction

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

Intended learning outcomes

Upon completion of the course the

student will be able to

- explain different dynamical states and instabilities in a power system,
- create mathematical models for dynamic and stability analysis of power systems,
- design excitation systems to improve transient stability, and power oscillations damping,
- explain and perform frequency control.

Course contents

The course deals with advanced methods for analysis of power system dynamic, stability and control.

Course literature

Course compendia

Examination

- TEN1 - Examination, 7.5 credits, grading scale: A, B, C, D, E, FX, 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

One written examination, 7,5 (HEC).

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.