



# FEI3260 Maintenance Management of Power Systems 8.0 credits

Underhållningsstyrning av elkraftsystem

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 FEI3260 valid from Autumn 2011

## Grading scale

## Education cycle

Third cycle

## Specific prerequisites

## Language of instruction

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

## Intended learning outcomes

The course is aimed at you that want to get a deep insight into the different maintenance management problems that exist for power systems.

- Insight into a wide array of maintenance and asset management techniques for power systems
- Identification of maintenance problems in the power system
- Development of potential solutions
- Presentation techniques, oral and written

After completed course the participants shall be able to publish results (conference level) on one of the topics:

- (1) Reliability data assessment and modeling,
- (2) Reliability centered maintenance for maintenance optimization,
- (3) Condition monitoring and diagnostics methods and
- (4) Computer tools supporting techniques for maintenance planning.

The basic concept is that the student produces work on the topic on a scientific level and presents it to fellow students. Seminar 1 is held by lecturers and seminar 2 by the students.

## Course contents

Reliability data assessment and modeling

Reliability centered asset management and optimization

Condition monitoring and diagnostics methods

Computer tools supporting techniques for maintenance planning

Maintenance problems in the power system and potential solutions.

Presentation technique, oral and written.

## Disposition

Seminar 1, seminar 2, project work 120h, presentation of project, active opponent, exam.

## Course literature

Lecture notes and student papers.

## 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

- Seminar 1
- Seminar 2
- Project approved and delivered before deadline
- Exam
- Oral presentation
- Opponent

## 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.