FSF3851 Topics in Control and Systems Theory 3.0 credits

Topics in Control and Systems Theory

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

Establishment

Grading scale

G

Education cycle

Third cycle

Specific prerequisites

A Master degree including at least 30 university credits (hp) in in Mathematics (Calculus, Linear algebra, Differential equations and transform method), and further at least 6 hp in Mathematical Statistics, 6 hp in Numerical analysis and 6 hp in Optimization.

Suitable prerequisites is the course SF2832 Mathematical Systems Theory or similar knowledge.

Language of instruction

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

Intended learning outcomes

The student will obtain a deep understanding of the subject, including the main results and the underlying mathematics. After the finish of the course the student shall

- Be aware of the state of the art of the subject
- Have the needed knowledge to conduct research in a relevant subject
- Understand how to use the theory in relevant applications

Course contents

The aim is to provide a deep understanding of the topic, both in theory and in potential applications, which is necessary for the students to conduct research in relevant fields.

Disposition

Lectures and project work

Course literature

Announced when the course is offered.

Depending on the topic, either research papers or text book.

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.

Final project

Other requirements for final grade

Successful completion of the project.

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.