SF2862 Stochastic Decision Support Models 7.5 credits

Stokastiska beslutsstödsmodeller

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

Establishment

Course syllabus for SF2862 valid from Autumn 2007

Grading scale

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

Education cycle

Second cycle

Main field of study

Mathematics

Specific prerequisites

A basic course in optimization and a course in reliability theory including Markov theory.

Language of instruction

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

Intended learning outcomes

That the student should be well acqainted with various quantitative stochastic decision support models and methods.

Course contents

Queuing theory, Z transform, event driven simulation, inventory theory, stochastic dynamical programming, forecasting, decision analysis and optimization of Markovian chains.

Course literature

Hillier and Lieberman: Introduction to operations research.

Examination

- HEM1 - Exercises, 0.0 credits, grading scale: A, B, C, D, E, FX, F
- 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.

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

Other requirements for final grade

A written examination. Homework assignments give credits on the final exam.

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.