SF2980 Risk Management 7.5 credits

Riskvärdering och riskhantering

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 SF2980 valid from Autumn 2007

Grading scale

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

Education cycle

Second cycle

Main field of study

Industrial Management,Mathematics

Specific prerequisites

SF2940 Probability Theory

SF2942 Portfolio Theory and Risk Management.

Language of instruction

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

Intended learning outcomes

To give a good knowledge of risk measures and advanced modelling and computational methods of relevance for the assessment and management of financial risks.

Course contents

Risk measures: Traditional risk measures, Value at Risk, Expected shortfall.

Modelling: Market risk, Credit risk and Operational risk.

Computational Methods: Historical simulation (bootstrap), Monte Carlo simulation, Extreme value theory.

Multivariate methods: Multivariate normal distribution, Spherical and elliptical distributions, Dependence measures, Copulas.

Course literature

Compendium.

Examination

- TEN1 - Examination, 4.5 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN1 - Assignments, 3.0 credits, grading scale: P, 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 exam, 4,5 university credits.
Home assignments, 3 university credits.

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.