



SF2980 Risk Management 7.5 credits

Risikvärdering och riskhantering

Course syllabus for SF2980 valid from Autumn 12

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

Grading scale: A, B, C, D, E, FX, F

Education cycle: Second cycle

Main field of study: Industrial Management, Mathematics

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 main content

Modeling and analysis of financial and insurance risks.

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

Empirical distributions, quantiles and risk measures. Analysis of uncertainty with confidence intervals and Bootstrap.

Parametric models: model selection, parameter estimation, validation, simulation.

Extreme value statistics

Multivariate models: measures of dependence, elliptical distributions, copulas, simulation, models for large portfolios, diversification and hedging

Language of instruction

Language of instruction is specified in the course offering information in the course and programme directory.

Eligibility

Passed courses in analysis in one and several variables, linear algebra, differential equations, mathematical statistics, numerical analysis

Passed SF2940 Probability Theory and SF2942 Portfolio Theory and Risk Management.

Literature

Hult, Lindskog, Hammarlid and Rehn: Risk and Portfolio Analysis: Principles and Methods, Springer

Examination

- TEN1 - Examination, 4.5 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN1 - Assignments, 3.0 credits, grading scale: P, F

Requirements for final grade

One written exam, 4.5 university credits.

Home assignments, 3 university credits.