



Faculty of Arts and Social Sciences  
Economics

## Syllabus

### Financial risk management

<b>Course Code:</b>	NEAD35
<b>Course Title:</b>	Financial risk management <i>Riskhantering i finansiella företag</i>
<b>Credits:</b>	7.5
<b>Degree Level:</b>	Master's level
<b>Progressive Specialisation:</b>	Second cycle, has only first-cycle course/s as entry requirements (A1N)

**Major Field of Study:**  
NAA (Economics)

#### Course Approval

The syllabus was approved by the Faculty of Arts and Social Sciences 2025-09-04, and is valid from the Spring semester 2026 at Karlstad University.

#### Prerequisites

90 ECTS credits in Economics, including NEAD34 Portfolio analysis, 7.5 ECTS credits, or NEGC18 Portfolio analysis, 7.5 ECTS credits, and Econometrics, 6 ECTS credits, from NEGB01 Economics - Continuation course, 30 ECTS credits, or NEGB22 Econometrics, 7.5 ECTS credits, and 15 ECTS credits in Statistics, plus upper secondary level English 6 or English level 2, or equivalent

#### Learning Outcomes

Upon completion of the course, students should be able to:

1. explain why financial crises occur and why a government deposit guarantee must be accompanied by strong state regulation and supervision of banks,
2. measure risk exposure in securities portfolios,
3. understand the principles behind immunisation of securities portfolios and apply these principles to practical cases,
4. measure the exposure of banks and other financial institutions to interest rate risk using duration and convexity measures, and apply these measures for immunising portfolios of interest-bearing financial instruments,
5. apply methods for calculating expected credit risks in banks and other credit institutions,
6. derive default probabilities from market prices of corporate bonds,
7. estimate models for non-constant or time-varying risk using the econometric methods EWMA and GARCH,
8. give an account of the rationale for international harmonisation of banking regulations in the so-called Basel rules,
9. use the Basel rules to measure the risk-adjusted capital adequacy of banks, and
10. understand the principles behind, and perform calculations of, Value at Risk (VaR) as well as Back-testing and Stress-testing of VaR calculations.

#### Content

The course focuses on methods for measuring and controlling risks in financial institutions such as banks and insurance companies. Deregulations of capital markets have increased the need for these organisations to develop their internal risk control. At the same time, periods of financial crises have highlighted the need for a new type of external regulation, including requirements for risk control techniques. Examples of risk control methods covered in the course include duration gap analysis, Value at Risk, and stress testing.

#### Reading List

See separate document.

#### Examination

Assessment is based on a written exam, individual written hand-in assignments, and a written independent project presented and discussed in a seminar.

If students have a decision from Karlstad University entitling them to Targeted Study Support due to a documented disability, the examiner has the right to give such students an adapted examination or to examine them in a different manner.

**Grades**

One of the grades Distinction (VG), Pass (G), or Fail (U) is awarded in the examination of the course.

**Quality Assurance**

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

**Course Certificate**

A course certificate will be provided upon request.

**Additional information**

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.