AI1108 Investment Analysis 7.5 credits

Investeringsanalys

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 AI1108 valid from Autumn 2008

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Civil Engineering and Built Enviornment-students should have completed Samhällsekonomi. Master-students should meet general admissions criteria for KTH Master programmes as well as specific criteria for Real Estate Management.

Language of instruction

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

Intended learning outcomes

The course aim is to provide basic theoretical and practical knowledge about investment analysis, with emphasis on real estate.

The course should give you knowledge in:

- Identify and explain the basic steps in the investment process.
- Derive and understand the origin of the major formulas used in present value calculations.
- Evaluate different investment alternatives.
- Explain how risk is defined and how to quantify risk.
- Define and compute different return measures.
- Describe how diversification affects the risk of a portfolio.
- Deal with risk and uncertainty applying sensitivity analysis.
- Understand how leverage affects investments.
- Use decision trees to describe real options embedded in projects.
- Develop Excel spreadsheets for investment decision-making.

Course contents

The course contains the following parts:

- Capital budgeting. The aim is to provide advanced knowledge in theory and methods for asset valuation, profitability analysis of investments and decision criteria in capital budgeting such as present value, internal rate of return, pay-off etc.
- Cash flow analysis of complex investments with emphasis on property applications. Analysis of financing decisions.
- Analysis of risk in investments and the relationship between risk and return.
- Project work: making a cash flow analysis in Excel.

Course literature

D. Geltner – N. Miller: Commercial Real Estate Analysis & Investments.

R. Brealey – S. Myers – F. Allen: Corporate Finance

Examination

- PRO1 - Project, 3.0 credits, grading scale: P, F
- TEN1 - Examination, 4.5 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.

Other requirements for final grade

Written exam (TEN1; 4,5 cr)
Project work(PRO1; 3 cr)

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.