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

The course syllabus is valid from Autumn 2024 according to decision of Director of First and Second Cycle Education A 2024-0333, 3.2.2Decision date: 2024-03-20

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Knowledge in mathematics corresponding to the content in course:

SF1627 Mathematics for Economists 9hp (TFOFK, TFAFK)

or

SF1625 Single Variable Calculus 7,5hp (CSAMH)

or

AF1763 Mathematics 1, Linear Algebra and AF1764 Mathematics 2, Calculus in One Variable

and

Knowledge in Economics corresponding to the content in course:

AI1128 Economics of the Built Environment, 7,5hp (TFOFK, TFAFK, CSAMH)

or

AF1740 Economics, calculation and organization 7,5 hp (TIBYH)

Language of instruction

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

Intended learning outcomes

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

- Explain the concepts of interest rate and time value of money
- Apply formulas to manage time value of money
- Analyze investments based on different methods for profitability assessment and with respect to sustainability goals through life-cycle economic analysis and timing of investments
- Through groupwork construct and apply computer based cash-flow models for analysis of investments and profitability assessment

Course contents

- Formulas used for taking into consideration the time value of money
- Capital budgeting. Theory and methods for profitability analysis of investments and decision criteria in capital budgeting
- Cash-flow analysis of investments on both firm and equity level with emphasis on real estate applications
- Introduction to programming in Excel and applied exercises with focus on formula construction and how to structure a larger model in Excel
- Project work: building a cash-flow model in Excel for analysis of commercial property investments

Examination

- PRO2 - Project, 2.5 credits, grading scale: P, F
- TEN2 - Written Exam, 5.0 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.

The project shall be made in groups, but the students are examined on an individual basis. Students shall complete the project work within the time limit given by the head teacher in order pass the project. Students who fail the project may be examined again during the following re-exam period.

Other requirements for final grade

If all requirements are fulfilled, the final grade on the course will be the same as the grade on the written 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.