AF1780 Data Analysis and Programming for Management and Finance 7.5 credits

Dataanalys och programmering för ekonomer

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

Establishment

The official course syllabus is valid from the spring semester 2026 according to the Director of First and Second Cycle Education: HS-2025-1138. Decision date: 2025-06-13

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

At least 3,0 ects credits in linear algebra or equivalent knowledge.

Intended learning outcomes

After passing the course, the student should be able to:

- Present findings about financial data using different visualisation techniques
- Combine, manage and analyse heterogeneous data from multiple sources
- Break down problems into smaller parts and use programming to solve them
- Apply programming techniques for effective management of projects, reports and finance.

Course contents

The course aims to provide basic knowledge of analyzing data in finance, modeling and information flow as well as basic knowledge of programming in Python. The course includes the following parts:

- Different types of code and basic principles in Python for example variables, functions and classes.
- Basic knowledge of data structures, processing and manipulation.
- Data management and communication.
- Real-life projects in finance and economics.

Examination

- LAB1 - Computer assignment, 3.0 credits, grading scale: P, F
- LAB2 - Computer assignment, 2.0 credits, grading scale: P, F
- LAB3 - Computer assignment, 1.0 credits, grading scale: P, F
- TEN1 - Written exam, 1.5 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.
- If the course is discontinued, students may request to be examined during the following two academic years.

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.