

Portfolio Management

Programme course

6 credits

Portföljförvaltning

TPPE33

Valid from: 2017 Spring semester

Determined by
Board of Studies for Industrial
Engineering and Logistics

Date determined
2017-01-25

Main field of study

Industrial Engineering and Management

Course level

Second cycle

Advancement level

A1X

Course offered for

- Industrial Engineering and Management - International, M Sc in Engineering
- Industrial Engineering and Management, M Sc in Engineering
- Applied Physics and Electrical Engineering, M Sc in Engineering
- Applied Physics and Electrical Engineering - International, M Sc in Engineering

Entry requirements

Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

Prerequisites

Basic course in optimization, mathematical statistics and basic course about financial instruments

Intended learning outcomes

After the course the student is expected to:

- Be able to explain management strategies for financial portfolios
- Be able to develop and use single- and multi-factor models to predict future expected portfolio performance
- Be able to use modern portfolio theory to determine optimal management
- Be able to evaluate portfolio management with modern portfolio theory

Course content

- Portfolio management: Asset classes; Active/passive management; Hedge funds
- Basic return and risk calculations
- Markowitz portfolio selection theory
- Capital Asset Pricing Model: Basic and modified versions
- Multi-factor models: Arbitrage Pricing Theory and empirical models
- Performance measurement with single- and multi-factor models.
- Methods for choice of fund manager and decomposition of manager performance

Teaching and working methods

Lectures and computer exercises.

Examination

PRA1 Written and oral presentation of project work 6 credits U, 3, 4, 5

Grades

Four-grade scale, LiU, U, 3, 4, 5

Other information

Supplementary courses:
Financial optimization

Department

Institutionen för ekonomisk och industriell utveckling

Director of Studies or equivalent

Fredrik Persson

Examiner

Jörgen Blomvall

Education components

Preliminary scheduled hours: 30 h

Recommended self-study hours: 130 h

Course literature

Amenc och Le Sourd: Portfolio Theory and Performance Analysis

Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at http://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.