

# Economic Analysis: Decision- and Financial Methodology

Programme course

6 credits

Ekonomisk analys: Besluts- och finansiell metodik

TPPE24

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

First cycle

## Advancement level

G2X

## Course offered for

- Industrial Engineering and Management - International, M Sc in Engineering
- Mathematics
- Industrial Engineering and Management, 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

Mathematical statistics, Operations Research, Algebra, Calculus, Controlling, Economic Analysis: Economic Theory

## Intended learning outcomes

The course provides the participants with an analytic, systematic and critical approach to economic decision making within various domains. Based on decision theory, the normative models of the course form a coherent approach to managerial rationality. From an open introduction in decision theory, over expected utility theory and game theory, the course advances skills in quantitative economic modelling and analysis to be used in graduate courses in all majors, and for classes in operations research. Particular emphasis is also given to investment analysis in the course.

## Course content

Decision analysis:: Modelling decision, man and environment.

Decision Theory: Decisions under uncertainty.

Game Theory: Strategic behavior.

Risk Theory: Expected Utility Theory.

Investment Analysis: Investment Appraisal.

## Teaching and working methods

The lectures are devoted to theoretical presentations, introductions to solution approaches and advanced applications. The exercises train applied problem solving using prepared cases. The voluntary computer laboratory gives useful skills in solving real-life investment analysis cases using spreadsheets.

## Examination

TEN1    Written examination                      6 credits                      U, 3, 4, 5

## Grades

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

## Department

Institutionen för ekonomisk och industriell utveckling

## Director of Studies or equivalent

Fredrik Persson

## Examiner

Ou Tang

## Education components

Preliminary scheduled hours: 50 h

Recommended self-study hours: 110 h

## Course literature

Preliminärt: Samuelson, W. F. and Marks, S. G. (2010), Managerial Economics, 6th edition, John Wiley And Sons, ISBN-978-0-470-41437-8

## 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](http://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva).