



## Course syllabus

Faculty Board of Science and Engineering  
School of Engineering

2MT009 Livscykelkostnadsanalys, 7,5 högskolepoäng  
Life Cycle Cost Analysis, 7.5 credits

**Main field of study**

Mechanical Engineering

**Subject Group**

Mechanical Engineering

**Level of classification**

First Level

**Progression**

G2F

**Date of Ratification**

Approved by Organisational Committee 2009-11-16

The course syllabus is valid from autumn semester 2010

**Prerequisites**

Two-year study in Industrial Engineering, -Business, or - equivalent program.

## Expected learning outcomes

The student can:

- describe the system/product/process life cycle cost (LCC) and identify the activities in each phase,
- be familiar with different ways of categorizing cost including cost breakdown structure (CBS),
- estimate all applicable costs for each of the categories in CBS and for each year in the system life cycle,
- understand and apply Money-Time relationships and equivalence,
- develop and demonstrate the economic analysis and comparison of mutually exclusive design alternatives,
- evaluate feasible alternatives and select a preferred one.

## Content

The course consists of the following elements:

- LCC Methodology
- Cost concepts
- Cost estimation techniques
- Money-Time relationships and equivalence

- Multiple criteria decision making (MCDM)

### Type of Instruction

Teaching consists of lectures, group-work, laboratory work, submitted assignments, seminars and case studies (projects).

### Examination

The course is assessed with the grades U,3,4 or 5.

The students' performance can be evaluated through assignments, small written exam (s), seminars, written reports of project work (case studies), presentation and opposition and written and/or oral exam of the compulsory work.

### Course Evaluation

NO VALUE DEFINED

### Credit Overlap

The course overlaps about 70% with SEC922 and SE9043

### Required Reading and Additional Study Material

#### **Required reading**

Wicks, E., J Luxhoj & W. Sullivan, *Engineering Economy*, Pearson Education, latest edition. 500 pages.

Relevant articles