



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 the Board of the School of Engineering 2009-11-16

Revised 2011-01-04

The course syllabus is valid from autumn semester 2011

Prerequisites

60 credits in the subject Mechanical Engineering or Business Administration or similar

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

This course cannot be part of a degree in combination with another course in which the content fully or partly correspond to the content of this course: 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