



## Course syllabus

Faculty of Technology

Department of Mechanical Engineering

2SE014 Kostnadsanalys, 7,5 högskolepoäng

Cost Analysis, 7.5 credits

### **Main field of study**

Total Quality Maintenance

### **Subject Group**

Industrial Engineering and Management

### **Level of classification**

First Level

### **Progression**

G2F

### **Date of Ratification**

Approved 2009-11-16

Revised 2013-06-15 by Faculty of Technology. Review of Literature.

The course syllabus is valid from autumn semester 2013

### **Prerequisites**

Basic eligibility and Mathematics/Mathematical Statistics comparable to Computational Methods for Technical Applications (1MA112), 15 Credits, Business Driven Quality Maintenance, 7,5 Credits and additional 37,5 Credits in the subject Total Quality Maintenance.

## Objectives

After completing the course the student is expected to be able to

- account for definitions, concepts, methods and tools of LCC/LCP in an industrial context, as well as their

applications.

- exemplify application areas for definitions, concepts, methods and tools of LCC/LCP.
- understand how LCC/LCP can be used as decision making tool/method with regards (in complement) to technical/engineering performance.

## Content

The course comprises the following elements:

- Introduction to the "time value of money"
- LCC components
- LCC models

- LCC as a decision making tool
- LCC applications in industry

## Type of Instruction

The teaching consists of lectures, group work, seminars, assignments and a case study.

## Examination

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

On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.

The examination is based on submitted reports and oral or written presentation of compulsory assignments.

## Course Evaluation

A course evaluation will be carried out and compiled after the course is completed. The compilation will be presented to the current board as well as to the students and filed by the coordinating department.

## Other

Some elements of the course may entail costs defrayed by the course participant.

The course language is English if international students attend the course.

## Required Reading and Additional Study Material

### Required reading

Benjamin S. Blanchard, *Logistics engineering and management*, Prentice hall, latest edition. 526 pages.

Current scientific articles in addition

### Recommended literature

Hagberg, Leo & Henriksson, Tomas (1996). *Profitable maintenance: 8 steps to assured production. 4, The LCP methodology*. Stockholm: Mentor Communications

William G. Sullivan, Elin M. Wicks and James T. Luxhoj, *Engineering economy*, Pearson Education, latest edition. 450 pages.

Wolter J. Fabrycky and Benjamin S. Blanchard (1991) *Life-Cycle Cost and Economic Analysis.*, Prentice Hall