



## Course syllabus

Faculty Board of Science and Engineering  
School of Engineering

4SE01E Examensarbete på magisternivå, 30 högskolepoäng  
Degree Project, 30 credits

### **Main field of study**

Total Quality Maintenance

### **Subject Group**

Industrial Engineering and Management

### **Level of classification**

Second Level

### **Progression**

A1E

### **Date of Ratification**

Approved by Organisational Committee 2009-07-24

The course syllabus is valid from spring semester 2010

### **Prerequisites**

The requirement for admission to the course is that the student has taken courses corresponding to 52,5 credits in Total Quality Maintenance.

## Expected learning outcomes

After completing the course the students are expected to

- be able to apply and deepen the knowledge acquired during the time of study
- know the foundations of scientific methods
- define problems, plan and implement a task of research nature
- present, analyze and evaluate an industrial problem
- present their results orally and in writing
- write a scientific thesis according to the requirements for internal technical reports in "Rapportinstruktion för systemekonomi (Report instruction for Total Quality Maintenance)"
- critically examine different information sources"

## Content

The course comprises the following elements:

- During the course the student in consultation with the examiner and supervisor is to implement and present a major task of research nature
- The work is to be an industrial application of 2-3 areas

within Total Quality Maintenance (quality, logistics, maintenance, LCC, its integrations).

- The work is to be presented in a report which is either a scientific thesis or an investigation report on a scientific basis. The report also has to be defended in a seminar.
- The report should be written in English unless there are special reasons for using Swedish.

### Type of Instruction

The teaching consists of a number of lectures on methodology with the aim of giving an introduction to the scientific problem as well as discussion seminars. Apart from this, tuition alone is provided.

### Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

The examination is based on the submitted report of the degree project as well as on the opposition to another report produced in the course

### Course Evaluation

When the course has finished, an evaluation is compiled. The results are reported to the students and then archived according to the rules of the school.

### Other

Some course elements may involve costs that have to be defrayed by the course participant. The course is offered in English if there are international participants.

### Required Reading and Additional Study Material

#### **Required reading**

Chosen in consultation with the supervisor

#### **Suggested literature**

Holmer, I. M., Solvang, B. K. Forskningsmetodik – om kvalitativa och kvantitativa metoder, Studentlitteratur, 1991

Backman, Jarl Rapporter och uppsatser, Studentlitteratur 1998

Andersson, E. S., Schwencke, E. Projektarbete – en vägledning för studenter, Studentlitteratur 1998

Klefsjö, B., Eliasson, H. De sju ledningsverktygen – för effektivare planering av förbättringsarbete, Studentlitteratur, 1999

American Psychological Association. Publication Manual of the American Psychological Association (4th ed), Washington DC : American Psychological Association, 1994

Day, R. A. How to write & publish a scientific paper (5th ed.), Cambridge: Cambridge University Press, 1988

Jarick, A. Från tanke till text, Studentlitteratur, 1996

Graziano, A. M., Raulin, M. L. Research methods: a process of inquiry, 4th ed. Boston : Allyn and Bacon, cop. 2000

Thurén, T. Vetenskapsteori för nybörjare, Liber, 1996