



## Course syllabus

Faculty Board of Science and Engineering  
School of Engineering

2SE09E Examensarbete på kandidatnivå, 15 högskolepoäng  
Degree Project on Bachelor Level, 15 credits

### **Main field of study**

Total Quality Maintenance

### **Subject Group**

Industrial Engineering and Management

### **Level of classification**

First Level

### **Progression**

G2E

### **Date of Ratification**

Approved by Organisational Committee 2009-07-24

The course syllabus is valid from spring semester 2010

### **Prerequisites**

The student is expected to have successfully completed 45 higher education credits on progression G1F or higher within the subject of Total Quality Maintenance, in which 1SE010 Quality Management, 1SE016 Maintenance planning and 1SE007 Facilities Planning and Production Management or similar are included.

## 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 and analyze an industrial problem
- present their results orally and in writing
- write a scientific thesis according to the requirements for internal reports
- critically examine different information sources

## Content

During the course the student, in consultation with the examiner and supervisor, is to implement and present a 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

### **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**

#### **Reference Literature**

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

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

Chalmers, A., What is This Thing Called Science?, University of Queensland Press, Australia, 1976

Järvinen, Pertti., On research methods, Opinpaja Oy, Tampere, 1999

Yin, Robert K., Case Study Research - Design and Methods 3d Ed., Sage Publications Inc., Thousand Oaks., 2003