



## Course syllabus

Faculty Board of Science and Engineering  
School of Engineering

5SE01E Systemekonomi, examensarbete (master), 30 högskolepoäng  
Total Quality Maintenance, Degree Project (two-year master level), 30 credits

### **Main field of study**

Total Quality Maintenance

### **Subject Group**

Industrial Engineering and Management

### **Level of classification**

Second Level

### **Progression**

A2E

### **Date of Ratification**

Approved by the Board of the School of Engineering 2011-06-13

The course syllabus is valid from spring semester 2012

### **Prerequisites**

To be admitted to the course basic eligibility for studies on advanced level is required as well as knowledge corresponding to English B, Research methodology (4SE306) and at least 30 hec courses within Total Quality Maintenance on advanced level.

## Objectives

After completing the course the students are expected to be able to:

- define and formulate scientific problems and research questions
- judge the appropriateness of different scientific methods and select the most applicable scientific method for the problem formulated
- plan and implement a task of research nature
- conduct a research project using scientific methods
- present, analyse and evaluate an industrial problem
- present their results orally and in writing according to the requirements of scientific reporting
- critically examine different information sources
- apply a critical attitude towards the reached results
- apply and deepen the knowledge acquired during the time of study

## Content

The course comprises the following:

- Problem identification and formulation of research questions
- Study design
- Planning and execution of a research project
- Processing and analysis of data
- Result interpretation
- Synthesis, reporting and result accountancy, both in written and oral form

### **Type of Instruction**

The course is in form of an independent work supported by tuition. The work setup is described in the project plan, which has to be accepted by the examiner. In addition, a series of seminars are held.

### **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, oral examination of the work as well as on the opposition on another report produced.

### **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.

### **Required Reading and Additional Study Material**

#### **Literature**

Course literature is selected in cooperation with the tutor and the examiner.