



Course syllabus

Faculty Board of Science and Engineering
School of Engineering

4SE31E Examensarbete på magisternivå, 15 högskolepoäng
Degree Project, master one-year, 15 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

Basic eligibility and knowledge corresponding to Asset Health Management II 7,5 hp, Maintenance Management 7,5 hp, and Case Study II 7,5 hp.

Expected learning outcomes

After completing the course the students are expected to

- be able to apply 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)"

Content

The course comprises the following elements:

- Introduction to scientific work
- Scientific methods
- Scientific report-writing
- Basic source criticism
- The implementation of a larger task of research nature

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).

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 for methods and report-writing:

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

Backman, Jarl Rapport 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