

# MG2202 Quality Control 9.0 credits

#### **Kvalitet**

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

#### **Establishment**

Course syllabus for MG2202 valid from Autumn 2007

## **Grading scale**

A, B, C, D, E, FX, F

## **Education cycle**

Second cycle

## Main field of study

**Mechanical Engineering** 

# Specific prerequisites

MG240E Introduction to Production Engineering and Management or eql.

### Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

#### Intended learning outcomes

After the study course the participant should be able to independently

- Lead and manage quality work in an organisation
- Formulate and implement a quality management system
- Lead work in business process development and reengineering
- Use Quality Function Deployment for planning changes and product development
- Perform full and reduced 2-level multiple factor design of experiments
- Calculate capability and control lines for a production process
- Gather and statistically handle data in production
- Use statistical sampling methods

#### Course contents

The study course covers all the areas of the ASQ certified quality engineer requirements which include statistical methods for sampling, design of experiments, statistical process control as well as the leadership parts of quality work. The later part includes understanding the importance of the organisation's business strategy, the relation to people and the difficulties in implementing new ways of working.

#### Course literature

A first course in Quality Engineering

K.S. Krishnamoorthi (2006), Pearson/Prentice Hall

Handouts and slides from lectures

#### **Examination**

- INL1 Assignment, 3.0 credits, grading scale: P, F
- TEN1 Examination, 6.0 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

## Other requirements for final grade

Assignments (INL1; 3 hp)

# **Ethical approach**

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.