

MG2033 Quality Control 6.0 credits

Kvalitet

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

Establishment

Grading scale

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

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

MG1001 Manufacturing Technology or

MG1006 Design and Product Realization - Manufacturing

or equivalent

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
- Calculate capability and control lines for a production process
- Gather and statistically handle data in production

Course contents

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

Disposition

The study course is an introduction to part of the body of knowledge of a certified quality engineer according to American Society of Quality. Please see: http://www.asq.org/certification/quality-engineer/bok.html

Course literature

A first course in Quality Engineering

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

Handouts and slides from lectures

Examination

• 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.

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

Other requirements for final grade

Assignments (INL1; 2 hp)

Written examination (TEN1; 4hp)

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.