MG2202 Quality Control 9.0 credits

Kvalitet

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

Establishment

Course syllabus for MG2202 valid from Autumn 2008

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.

Compulsory for TPRMM

Open for international exchange students at KTH subject to availability.

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 course covers all aspects of quality control, assurance and management in organizations which includes leading quality practice and improvement, problem finding and solving using statistical, managerial and risk assessment tools and techniques and methods of changing organization´s culture for ensuring quality and customer satisfaction.

Course literature

"Managing Quality" Barrie G. Dale, Ton van Der Wiele and Jos van Iwaarden, fifth edition, ISBN 9781405142793. Or any book on Quality Management.

"Implementing ISO 9000:200 (2001) seaver, Matt, Gower Publishing Limited. ISBN 9780566083730, 9780566089732 (available in ebrary, KTH e-recourses).

"Quality from Customer Needs to Customer Satisfaction" Bo Bergman/Bengt Klefsjö, Studentlitteratur (2004)ISBN10:9144041667, ISBN13:9789144041667

Miller and Freund's Probability and Statistics for Engineers (Paperback) av Johnson, Richard A.
2009 (ISBN 0321694988)

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.

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

Other requirements for final grade

Assignments (INL1; 3 hp)

Written examination (TEN1; 6hp)

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.