## **Linnæus University**

### Course syllabus

Faculty Board of Science and Engineering School of Engineering

1ZT002 Kvalitetsteknik, 7,5 högskolepoäng Quality Management, 7.5 credits

#### Main field of study

Mechanical Engineering

#### **Subject Group**

Mechanical Engineering

#### Level of classification

First Level

#### **Progression**

G<sub>1</sub>N

#### **Date of Ratification**

Approved by Organisational Committee 2009-12-15

The course syllabus is valid from autumn semester 2010

#### **Prerequisites**

General entry requirements and Mathematics C or Mathematics 3b / 3c.

### Expected learning outcomes

After completing the course the student is expected to have acquired

- basic knowledge of quality management
- familiarity with various quality systems
- familiarity with how quality tools are applied in practice
- familiarity with value-creating processes and how these are measured
- familiarity with process analysis tools
- familiarity with environment aspects from a quality perspective
- familiarity with process variations

#### Content

The course comprises the following elements:

- the relation between quality and the market
- tools for development quality
- tools for continuous improvement
- the properties of various activity systems
- processes and process management
- measures and measurement methods for value-creating processes
- process analyses

- sustainable profitability and quality
- the relation between environment aspects and quality
- quality activity organization and leadership
- statistical methods for stable processes

#### Type of Instruction

The teaching consists of lectures, laboratory work and exercises. Participation in the course laboratory work is compulsory.

#### Examination

The course is assessed with the grades U,3,4 or 5.

On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.

The assessment of student performances is usually written and normally takes place during special examination periods. The

assessment may also be based on submitted presentations of laboratory work and assignments.

#### Course Evaluation

A written course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The course evaluation will be filed at the department.

#### Credit Overlap

Overlaps completely with TBP907/TB907A

# Required Reading and Additional Study Material Required reading

Bo Bergman, Bengt Klefsjö, *Kvalitet från behov till användning*, Studentlitteratur, 2007. 560/612 pages.

Donald J Wheeler, *Understanding variation*. II edition. SPC Press 1999. 120/153 pages.