MSG600, STATISTICAL QUALITY CONTROL, 7.5 credit points

Level: undergraduate

1. Authorisation.
The course plan has been authorised by the vice-dean of the Department of Mathematical Sciences on November 9, 2006, to be valid from July 1, 2007.

Educational field: Mathematical Sciences

2. Educational context
The course is part of the Bachelor Program in Mathematical Sciences. It is also open for students outside the program who meet the course prerequisites.

3. Prerequisites
Basic course in probability and statistics.

4. Goals and learning outcomes
Statistical quality control is a set of methods for achieving quality control in manufacturing processes. At the end of the course, the student should

- understand and be able to apply basic probabilistic and statistical techniques for modeling and analysis of variability associated with production manufacturing

- be able to use some modern tools of quality control including ISO 9000 and 7 QC, and have a general knowledge about other modern methods of statistical quality control.

5. Course description
The course consists of lectures, exercises, computer laborations, and home assignments.
Course content:
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6. Literature
Se separate list.

7. Assessment
The course evaluation is based on the results from the computer laborations, the home assignments, and the written final examination.

8. Grades
The grade levels are Fail (U), Pass (G), and High Pass (VG). A wish for an ECTS grade should be reported to the examiner at the beginning of the course.

9. Course evaluation
In the middle of the course the teacher arranges a feedback discussion with the students and at the end of the course the students will be asked to answer a questionnaire. The results of the questionnaire will be processed by the teacher together with student representatives.

10. Additional information.
The course is given in English.