## **Linnæus University**

### Course syllabus

Faculty Board of Science and Engineering School of Computer Science, Physics and Mathematics

4DV107 Programvarukvalitet, 7,5 högskolepoäng Software Quality, 7.5 credits

#### Main field of study

Computer Science

#### **Subject Group**

Informatics/Computer and Systems Sciences

#### Level of classification

Second Level

#### **Progression**

A1F

#### **Date of Ratification**

Approved by Organisational Committee 2009-09-08

The course syllabus is valid from spring semester 2010

#### **Prerequisites**

Software Engineering - Design 15 higher education credits or Software Architechtures 7,5 higher education credits or the equivalent.

#### Expected learning outcomes

Upon completion of the course, the student should be able to:

- understand software quality management problems, general solutions, technologies and standards
- define, implement, and apply software (process) metrics apply software quality management to software and software development processes

#### Content

The course gives an introduction to software quality management. It provides hands-on practical experiences implementing software quality metrics.

The course covers the following topics:

- problems of software quality management
- metrics in the software engineering process
- metrics suites and object-oriented metrics
- metrics tools
- assessment and prediction methods
- implementing Quality Models
- measurement theory

- standards
- novel approaches to software quality management

### Type of Instruction

Lectures, seminars and self studies.

#### Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

Written examination and/or assignments which are presented orally and/or in written form. The assessment method will be decided at the start of the course.

Students who do not pass the regular examination are given the opportunity to do a resit examination shortly after the regular examination.

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.

#### **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.

# Required Reading and Additional Study Material Required reading

Together with the supervisor and the examiner, relevant literature / papers will be selected.