Linnæus University

Course syllabus

Faculty of Technology
Department of Computer Science

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 2009-09-08
Revised 2014-10-07 by Faculty of Technology.
The course syllabus is valid from spring semester 2015

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

Objectives
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
- recognize, discuss, and assess ethical and societal considerations in relation to software quality

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.