



Course syllabus

Faculty of Technology
Department of Computer Science

4DV607 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 Faculty of Technology 2015-05-22
The course syllabus is valid from spring semester 2016

Prerequisites

Software Engineering - Design 15 higher education credits or Software Architectures 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 A, B, C, D, E, Fx or F.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail (i.e. received the grade F).

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.

Course Evaluation

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty.

Credit Overlap

This course cannot be part of a degree in combination with another course in which the content fully or partly correspond to the content of this course: 4DV107 Software Quality, 7.5 credits

Other

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

Required Reading and Additional Study Material

Required reading

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