DD2480 Software Engineering Fundamentals 7.5 credits

Programutvecklingsteknikens grunder

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

Course syllabus for DD2480 valid from Spring 2019

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Computer Science and Engineering

Specific prerequisites

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

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

- apply revision control to a software project,
- systematically test and debug a program,
- combine different types of software testing technologies in a project,
- understand and use patterns for the design and implementation of software,
- deploy quality assurance techniques and judge their results.

Course contents

Requirements engineering.

Revision control, continuous integration, the life cycle for software.

Design patterns, components.

Testing and debugging.

Software maintenance, configuration management, refactoring.

Quality assurance: Estimation and measurement of performance and code complexity, scalability.

Course literature

Course material (book chapters, papers, web pages, etc.) will be provided on Canvas.

Examination

- ÖVN1 - Exercises, 7.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

Under special circumstances, other examination formats may be used.

In this course, the code of honor of the school is applied, see: http://www.kth.se/en/csc/utbildning/hederskodex

Other requirements for final grade

Passed laboratory assignments.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.