



DD2480 Software Engineering Fundamentals 7.5 credits

Programutvecklingsteknikens grunder

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

Establishment

On 2019-10-15, the Head of School of EECS has decided to establish this official course syllabus to apply from the spring semester 2020 (registration number J-2019-2101).

Grading scale

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

Education cycle

Second cycle

Main field of study

Computer Science and Engineering

Specific prerequisites

Object-Oriented Programming and basic computer science equivalent to one of the courses DD1320, DD1321, DD1325, DD1327, DD1338, DD1339, DD1340, DD1341 or DD1346.

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, students 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 pattern for 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.

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.

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

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.

Additional regulations

This course contains group projects and labs. Course registration after the official registration period is not possible, since we need to create the groups in the beginning of the course.