DD2482 Automated Software Testing and DevOps 7.5 credits

Automatiserad programtestning och DevOps

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

Establishment

The official course syllabus is valid from the spring semester 2022 in accordance with Head of School decision: J-2021-1741. Decision date: 10/08/2021

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 algorithms and datastructures equivalent to one of the courses DD1320, DD1321, DD1325, DD1327, DD1338, DD1339, DD1340, DD1341, DD1346 or ID1020.

Language of instruction

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

Intended learning outcomes

After passing the course, the student shall be able to

• write and deploy tests, and assess test quality

• use the state-of-the-art of software development platforms

• configure and deploy infrastructure software, including continuous integration, continuous delivery, and continuous deployment

• use collaborative platforms for software development

• design, deploy and orchestrate microservices and containers

in order to

• have the required skills of a Devops Engineer

• be prepared for lifelong learning with respect to fast-changing technology

Course contents

The course follows a flipped classroom pedagogy about:

Software testing.

Continuous integration.

Continuous delivery, continuous deployment, continuous monitoring.

Examination

• ÖVN1 - Exercise, 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.

Project based assessment: 4 graded projects.

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.