



# DD2482 Automated Software Testing and DevOps 7.5 credits

Automatiserad programtestning och DevOps

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

This official course syllabus is valid from the autumn semester 2024 in accordance with decision by the director of first and second cycle education: J-2024-0230. Date of decision: 05/02/2024

## Grading scale

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

## Education cycle

Second cycle

## Main field of study

Computer Science and Engineering

## Specific prerequisites

Knowledge and skills in object-oriented programming as well as algorithms and computer structures, 6 credits, corresponding to one of the courses DD1320, DD1321, DD1325, DD1327, DD1338, DD1339, DD1340, DD1341, DD1346 or ID1020.

Knowledge in English corresponding to the upper secondary course English B/English 6.

## 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.

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.