

# DD1369 Software Engineering in Project Form 10.5 credits

#### Programvarukonstruktion i projektform

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**

The official course syllabus is valid from the Autumn semester 2023 in accordance with Head of School decision: J-2023-1525. Decision date: 12/06/2023

#### Decision to discontinue this course

The course will be discontinued at the end of VT 2025 according to the Head of school decision: J-2023-1525. Decision date: 2023-06-12The course was given for the last time in Spring 2023. The last opportunity for examination in the course is given in Spring 2025. The examination is carried out during the transition period within the framework of the course DD1367.

## **Grading scale**

P, F

#### **Education cycle**

First cycle

## Main field of study

Technology

## Specific prerequisites

Knowledge and skills in programming, 6 higher education credits, equivalent to completed course

course DD1310/DD1311/DD1312/DD1314/DD1315/DD1316/DD1318/DD1321/DD1331/DD1337/DD100N/ID

Knowledge in basic computer science, 6 higher education credits, equivalent to completed course DD1320/DD1321/DD1325/DD1327/DD1338/DD2325/ID1020/ID1021.

Active participation in a course offering where the final examination is not yet reported in LADOK is considered equivalent to completion of the course.

Registering for a course is counted as active participation.

The term 'final examination' encompasses both the regular examination and the first re-examination.

## 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

- describe different development methods for software
- apply appropriate methods for design and implementation in modern software development
- apply established principles of production of the documentation that are necessary for planning, implementation and delivery of software development projects
- apply general guidelines and design principles for rhetoric and oral presentation
- practise the different communication situations with different interested parties that are relevant in a software development project
- work in large software development project groups, where the individuals have different roles and responsibility

in order to be prepared to participate in IT projects, independently of the size of the project and the project group.

#### **Course contents**

Theory: systematic principles for design of correct and robust software, life cycle models, the documentation standard PPS-05, project organisation and planning, project risks, software requirements capture and analysis.

Presentation of project proposals, assignment of project groups, project work and production of project planning document (PPD) and user requirements document (URD). Guest lectures by experts on software development from the industry.

Software development project: planning, requirements capture and analysis for a large software engineering project in groups of at least 10 students, in collaboration with a company or researcher that functions as an external client and provides the project proposal and evaluates the results.

Rhetoric and oral presentation.

#### **Examination**

• PRO1 - Reports and presentations, 10.5 credits, grading scale: P, 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.

## 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.