DD1393 Software Engineering 10.5 credits

Mjukvarukonstruktion

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

Establishment

Course syllabus for DD1393 valid from Spring 2019

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Language of instruction

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

Intended learning outcomes

On completion of the course, the student should 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 is 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 able to

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

Course contents

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

Course literature

• UML@classroom An Introduction to Object-Oriented Modeling, M. Seidl et al. Springer 2012.

• Agile! the Good, the Hype and the Ugly, Bertrand Meyer, Springer, 2014.

Examination

• ÖVN1 - Exercise, 10.5 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.

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

The grade of the course component Ã−VN1 constitutes the final grade of the course.

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.