



DD1365 Software Engineering

6.0 credits

Mjukvarukonstruktion

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

Establishment

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

All of the courses in computer science and mathematics compulsory for the computer science and engineering program plus the course DH1600 Communication in engineering sciences. One of these may be fulfilled during the course.

Language of instruction

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

Intended learning outcomes

The aims of the course are to provide:

- an overview of different theories of how software can be developed,
- knowledge and practical experience about which kinds of documents must be produced in the construction of large software systems,
- practical preparation for a career in IT,
- experience of working in a large development group, with different individual roles,
- experience of a large scale development project,
- guest lectures by industry experts in software engineering

so that students can

- apply appropriate methods for the design and implementation of modern software systems
- participate in large scale IT projects.

Course contents

Theory: systematic principles for the construction of correct and robust software, lifecycle models, PPS-05 documentation standard, project organisation and planning, project risk, software requirements capture and analysis.

Presentation of project proposals, assignment of project groups and work, student presentation of project planning document PPD and user requirements document URD.

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

Course literature

Ian Sommerville: Software Engineering, Addison Wesley, eighth edition

Examination

- ÖVN1 - Exercises, 6.0 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 all the regulations of the code of honor at the School of Computer science and Communication apply, see: http://www.kth.se/csc/student/heder-skodex/1.17237?l=en_UK.

Other requirements for final grade

Project reports PPD and URD (ÖVN1 6 hp, A, D, F)

There are activities in the course that require compulsory attendance.

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.