



DD1365 Software Engineering

6.0 credits

Mjukvarukonstruktion

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

Course syllabus for DD1365 valid from Autumn 2011

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Language of instruction

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

Intended learning outcomes

After the course the student should be able to

- describe different theories of how software can be developed,
- apply appropriate methods for the design and implementation of modern software systems,
- produce the documents needed in the construction of large software systems,
- work in large development groups, with different individual roles,

in order to

- be prepared to 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.

Specific prerequisites

Eligible for admission to DD1365 is a student who meets the following three requirements:

* has been promoted to study year 3 of the programme,

* has passed the courses DH1600/DH1602 Communication in Engineering Sciences and DD1340/DD1341/DD1320 Introduction to Computer Science (for students taking an international profile DH1600 is replaced by the first language course),

* either has a minimum of 100 ECTS credits from the programme at the beginning of the Autumn semester or has at least 104 ECTS credits from the programme at the beginning of period 2.

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.

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/hederskodex/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.