



ID2007 Processes for IT Production 7.5 credits

Processer för IT-produktion

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 ID2007 valid from Spring 2009

Grading scale

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

Education cycle

Second cycle

Main field of study

Language of instruction

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

Intended learning outcomes

The course gives an overview of the domain of software and information systems engineering. It is an advanced course on processes and management of software products, projects

and resources.

The goal of the course is to provide a broad and general perspective on software engineering and processes required for developing, evolving, maintaining and managing software products, projects, and resources. Another goal is to make students get insight into the recent research results within software and information systems engineering.

Course contents

The course deals with the presentation of the following topics:

- the subject of software engineering
- the subject of information systems engineering
- the concept of socio-technical systems
- software processes and process models
- system- and software requirements
- requirements engineering process
- system models
- formal specification
- architectural design
- distributed systems architectures
- object-oriented design
- real-time software design
- rapid software development
- design with reuse
- software reuse
- component-based software engineering
- verification and validation
- software testing
- dependability
- critical systems specification, development, and validation
- software project management
- managing people
- software cost estimation
- quality management
- process improvement
- legacy systems
- software evolution and maintenance
- configuration management

Disposition

- eight lectures
- seminars. The number of seminars will depend on the number of students. However, each student is obliged to be present at only one seminar.

Specific prerequisites

Course literature

Preliminary:

Ian Sommerville: Software Engineering (Upplaga/Edition: 8), Pearson-Addison Wesley, 2006, 0-321-31379-8

Examination

- INL1 - Assignment, 3.0 credits, grading scale: P, F
- TEN1 - Examination, 4.5 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.

- written exam
- 100% of questions will come from the Question Bank to be found on the course website.
- research task
- the students will study one topic. The results of their study will be presented during the seminars.

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.