



# II1302 Projects and Project Methods 7.5 credits

Projekt och projektmetoder

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

## Establishment

Course syllabus for II1302 valid from Spring 2011

## Grading scale

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

## Education cycle

First cycle

## Main field of study

Technology, Information Technology

## Specific prerequisites

**Completed upper secondary education including documented proficiency in Swedish corresponding to Swedish B and English corresponding to English A. For students who received/will receive their final school grades after 31 December 2009, there is an additional entry requirement for mathematics as follows: documented proficiency in mathematics corresponding to Mathematics A. And the specific requirements of mathematics, physics and chemistry corresponding to Mathematics D, Physics B and Chemistry A.**

Basic technical skills in an ICT field, such as programming, computer, electronics, embedded systems and more.

This skill is needed to participate as a team member with the task of building an ICT product or ICT service.

## Language of instruction

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

## Intended learning outcomes

The course aims to develop students' ability to implement a design project with other students in a small project team. The goal is to give students a basis for effective participation and leadership of projects.

After the course student should be able to:

- Apply an appropriate project processes
- Documenting specifications
- Be able to establish a project plan, risk analysis and test specifications.
- Be able to evaluate and document the completion of construction.
- Be able to present the results of the design.
- Has achieved improved skills in oral and written presentation.
- Be able to search and evaluate information on components, communication protocols or other technical specifications relevant to the project.
- Personally, able to construct / develop a part of a larger system.
- Be able to build a prototype and debug a product.
- Manage the project finance and accounting

## Course contents

- Group Dynamics, project methodology, leadership and communication.
- Work environment
- specific project methodology depending on the scope
- Working in groups of 3-8 persons
- Project Finance

## Disposition

The course is conducted, from the beginning of the course, as a project with planning and implementation. Teaching, study work, project work and discussions are carried out in direct connection with the project groups. Ordinary lectures are rare.

In the beginning the teacher leads the project work with the main goal to teach and show students how work in the project can be organized and implemented. As participants and groups starts to win knowledge of project methods so project control passes to them. Towards the end of the course project groups can plan and work on their own.

The course, which projects, has two "product goals" (this is the difference with "normal" projects), namely a knowledge (learning) and one design goals (ICT design). Design project is used to drive the need for project methodologies and it is not a requirement that the design is completed.

## Course literature

1. Bok: "Arbeta i projekt, -individen, gruppen, ledaren", Sven Eklund, Förlag Studentlitteratur, upplaga 3
2. Kompendium: "Scrum och XP from the Trenches"  
<http://www.infoq.com/minibooks/scrum-xp-from-the-trenches>
3. Artiklar och dokument som finns på Internet. Dessa anges under kursen gång och finns listade i "Bilda"-systemet.
4. Viss referenslitteratur med obligatoriskt läsinnehåll finns i projektsalen

## Equipment

Own LapTop

## Examination

- PRO1 - Project, 4.5 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Examination, 3.0 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.

**Exam questions** are essay-type and judged according to quality principles of Bloom's Taxonomy.

Score A: S = synthesis, V = valuation presented in any area.

Score B: Level A = analysis in several areas.

Score C: A = Analysis in any area

Score D: T = Application

Score E: F = Understanding

Score F: K = Knowledge just is not enough to pass.

**Project part** is the practical part of the course and the associated ability to develop and agree on responsibility, knowledge and skills in various project roles and quality of related artifacts.

## Other requirements for final grade

**Attendance Requirements:** The requirement for compulsory attendance at scheduled, in TimeEdit, project work period corresponding to about 140h

**Pass exam TEN1:** 3 credits, grade graduation A to F

**Approved project PRO1:** 4.5 credits, grade graduation A to F

The grade is calculated on a weighted average where AF is translated into the numbers 1-5. Arundning of half the values are up.

## 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.