



# IV1302 IT-project, part 1

## method 7.5 credits

IT-projekt, del 1 metod

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 IV1302 valid from Spring 2011

### Grading scale

P, F

### Education cycle

First cycle

### Main field of study

Technology

### Specific prerequisites

- object-oriented programming

### Language of instruction

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

## Intended learning outcomes

1. Demonstrate the ability to independently and creatively deal with different issues and analyze various methodological solutions from a holistic perspective.
2. Show the ability to describe the software development process and its constituent sub-processes.
3. Demonstrate ability to explain the interplay of software development activities.
4. Demonstrate the ability to critically and systematically use knowledge to evaluate modern software development methods.
5. Have the ability to apply knowledge in modern software development in order to create a software system.
6. Show the ability to act upon problems in modern software development and take appropriate measures.
7. Demonstrate the capability to communicate work and its deliverables both in written and in oral.

## Course contents

To enable students to understand the heart of agility, this course is integrated with two other courses (IS1204 and IS1003), which together will cover both the theory and practice of agile methods. During this course, the students will acquaint themselves with the theory, whereas during the IS1204 and IS1003, the student will practice the agile methods.

The course is going through the basic software engineering concepts and discuss how they have been applied within agile methods. It will discuss current problems within software engineering and present how they have been addressed with agile methods. While presenting the agile development cycle, the course will present various modern practices such as for instance, iterative development, pair programming, refactoring, test-first programming, release planning and show how those are combined. Finally, the course will discuss future methodological trends.

## Disposition

- 10 lectures
- 7 exercises

## Course literature

The students will have the freedom to choose their own literature. However, they will have access to the following compendium "Modern Ways of Developing Software Systems". In addition, they use support form the book by Will Scott, James Newkirk, "Visual Studio Team System, Better Software Development for Agile Teams", Addison-Wesley, 2007, ISBN-13: 978-0-321-41850-0 or ISBN-10: 0-321-41850-6.

## Equipment

- none

## Examination

- KOM1 - Communication, 1.5 credits, grading scale: P, F
- MET1 - Methods, 4.5 credits, grading scale: P, F
- ÖVN1 - Exercise, 1.5 credits, grading scale: P, 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 assignment in form of an essay

## Other requirements for final grade

- Communication (KOM1), 1.5 poäng
- Methods(MET1), 4.5 poäng
- Exercises (ÖVN1), 1,5 poäng

## 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.