



# DD2453 Advanced Formal Methods 7.5 credits

## Avancerade formella metoder

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 DD2453 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 is intended to put students in touch with the state-of-the-art in the area of formal modeling and analysis within some specific field of interest, and to train their presentation

and research skills. Upon completion of the course students will have shown their ability to acquire some state-of-the-art technique as presented in a scientific paper, to analyze it for correctness, applicability, and scope, to use and adapt it for some specifically given purpose, and to present their findings to their peers.

## Course contents

Students will select from a set of mini-projects offered by supervisors at the beginning of the course. Each mini-project will be based on the idea of acquiring and analyzing a state-of-the-art research paper, and students will be asked to perform some specific case study, adapt, implement, or otherwise reconstruct or validate the papers findings. The course starts with a number of lectures to introduce the subjects of main relevance for the course. This is completed by a midterm take-home exam. For the project work students may have to trace previous work and acquire some more specialized background knowledge. The results of the mini projects will be presented at a one day workshop at the end of the course.

## Specific prerequisites

## Course literature

Research papers. Miscellaneous background reading material.

## Examination

- PRO1 - Project, 7.5 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.

## Other requirements for final grade

Project involving report, presentation, and participation in workshop (PRO1; 7,5 university credits)

## 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.

