



# DA2110 Complementary Course in Mathematics 7.5 credits

Kompletteringskurs i matematik

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

## Establishment

Course syllabus for DA2110 valid from Autumn 2008

## Grading scale

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

## Education cycle

Second cycle

## Main field of study

## Specific prerequisites

At least 15 points (22,5 ECTS credits) mathematics.

## Language of instruction

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

## Intended learning outcomes

To give the students the knowledge and proficiency in calculus, linear algebra and basic probability that is required in Computer Science.

## Course contents

Proofs by Induction.

Linear algebra. Basic calculus with matrices and linear transformations.

Differential- and integral calculus. Limits and continuity. Partial derivatives.

Series and Taylors formula. Extremal problems with constraints.

Basic probability theory. Distribution functions. Independent and independent variables. Expectation, variance and standard deviation.

## Course literature

To be decided at course start.

## Examination

- TEN1 - Examination, 6.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory Work, 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.

If the course is discontinued, students may request to be examined during the following two academic years.

## Other requirements for final grade

Examination (TEN1; 6 university credits) and laboratory work (LAB1; 1,5 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.