IX1350 Mathematics for Programmers 7.5 credits

Matematik för programmerare

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

Establishment

Course syllabus for IX1350 valid from Autumn 2007

Grading scale

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

Education cycle

First cycle

Main field of study

Mathematics, Technology

Specific prerequisites

The courses 6B2906 Linear Algebra, 6B2016 Discrete Mathematics and 6B2025 Algorithms and Data Structures.

Language of instruction

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

Intended learning outcomes

The aim of the course is to:

- give the engineer a scientific view
- give insight in how mathematics is used in certain fields (see course content)

so that the student should be able to:

- use advanced mathematics in IT
- write effective code

Course contents

- Cryptography
- Information theory
- Probability theory and simulation
- Geometry in games and graphics

Examination

- TEN1 - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory Work, 4.5 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

Written exam (TEN1; 3 ECTS credits).
Problem and laboratory assignments (LAB1; 4,5 ECTS 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.