DD1010 Introduction to programming and computer knowledge 4.0 credits

Introduktion till programmering och datorkunskap

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

The official course syllabus is valid from spring semester 2024 according to the decision of Director of First and Second Cycle Education: J-2024-0279.Date of decision: 2024-02-05

Grading scale

P, F

Education cycle

First cycle

Main field of study

Specific prerequisites

Language of instruction

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

Intended learning outcomes

After passing the course, the student should be able to:

- explain how simple scripts in a scripting language work
- explain the function of the main hardware components of a computer

in order to receive a good insight in what programming is and basic knowledge about computers and digitisation.

Course contents

Choice and loops, manipulation of variable values, simple computing instructions, and extraction of data from lists.
The structure of computer pictures, connection between software and hardware, indication of numbers of bits and bytes with prefix (k, M, G, T), the hardware components processor, memory, router and network.
The structure of the Internet. The relation between analogue and digital and transfer between them. Basic computer security (passwords, phishing, malware).

Examination

- DAT1 - Computer test, 4.0 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.

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.