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

On 15/06/2020, the Head of School of EECS has decided to establish this official course syllabus to apply from the autumn semester 2020 (registration number J-2020-1354).

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 obtain a good basis in use of computers and programming before starting a bachelor of science in engineering education.

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.