DD100N Programming Techniques, Web Course 6.0 credits

Programmeringsteknik, webbkurs

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

Establishment

Course syllabus for DD100N valid from Autumn 2008

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

For "free movers" applying to single courses:

- Completed upper secondary education incl documented proficiency in English, Swedish and
- Mathematics corresponding to grade D

Language of instruction

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

Intended learning outcomes

- The goal of the course is to give the students
- computer practice, ability to write well structured programs, and knowledge of fundamental computer concepts,
- practice in solving construction problems and in working in small groups as well as individuallyso that they will
- consider computers and programming to be natural tools in the engineering work
- see the similarities between program construction and other types of construction work,
- be able to do some programming.

Course contents

Fundamental computer concepts.

Programming in a modern programming language (Python). Data structures. Simple graphics. Problem solving by dividing the problem into sub-problems. Program structuring. Several small programming exercises and one larger, individual programming exercise with emphasis on structuring and specification of the modules being used.

Disposition

This course is read entirely in your own speed over the net. The exception is the final oral presentation that takes place at KTH, Vallhallavägen, Stockholm.
The computer excercises are done over the net and also presented at the final oral presentation.

Course literature

All material is available on the course homepage.

Equipment

Computer with a webbreader and internetaccess. A Python interpreter can be downloaded at the start of the course.

Examination

- LAB3 - Laboratory Work, 3.0 credits, grading scale: A, B, C, D, E, FX, F

- LAB2 - Laboratory Work, 1.5 credits, grading scale: P, 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

Programming assignments (LAB1; 1 cr.).Programming assignments (LAB2; 1 cr.).Programming assignments (LAB3; 2 cr.)Final oral presentation.

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.