

PHYSICS

# FYD410 Programming in C-language Part II, 7.5 higher education credits

C-programmering II, 7,5 högskolepoäng *First Cycle* 

## Confirmation

This course syllabus was confirmed by Department of Physics on 2007-06-15 to be valid from 2007-07-01.

*Field of education:* Science 100% *Department:* Physics

#### Position in the educational system

Advanced course in the main subject physics. The course is given as part of the programme Computer-aided physical measuring techniques and as a freestanding course at University of Gothenburg. This course replaces FY0430 and both these courses can not be included in a degree.

The course can be part of the following programmes: 1) No translation available (NDFMH) and 2) Computer Aided Measurements in Physics (N1DAF)

Main field of studies	Specialization
Physics	G1F, First Cycle, has less than 60 credits in
	first-cycle course/s as entry requirements

#### **Entry requirements**

Passed course FYD410, Modern measurement system I or the equivalent

#### Learning outcomes

The aim of the course is that the student should obtain knowledge in programming of advanced modern measurement systems as well as structure of these.

After having gone through the course "C programming II" the student should:

- be able to write programme in C to handle and govern advanced modern measurement systems.
- be able to handle in and output signals in modern measurement systems.
- have a basic understanding of good program structure and debugging of programs in C.
- have knowledge in instrument control and network.
- be able to communicate with different forms of hard and software.

# Course content

The student utilises LabWindows/CVI to develop advanced measure and control programs. The student will acquire knowledge in instrument control networks, microcontroller communication, LabVIEW, different busses, protocols, gates, daq cards, etc

## Form of teaching

Teaching is given in the form of lectures and laboratory sessions. For examination, it is required that all laboratory sessions are completed and passed, as well as that a final assignment is carried out and is presented. Depending on the degree of difficulty of the final assignment and submitted exercises, the grade Pass is given or Passed with distinction.

Language of instruction: Swedish

## Assessment

Additional examination sessions are offered the students who have not passed at the regular examination. An overall grade is received then all compulsory components have passed. Student who has failed two times in test for course, or part of course, has the right to request another examiner. The application is sent to the relevant department.

# Grades

The grading scale comprises: Fail (U), Pass (G), Pass with Distinction (VG).

Report to course coordinator no later than a week after start of the course if ECTS grade is required.

### **Course evaluation**

Course evaluation is carried out by students and teachers during the course as well as at the end of the course.