

# HI105X Degree Project in Computer Technology and Real Time Programming, First Cycle 15.0 credits

Examensarbete inom datateknik och realtidsprogrammering, grundnivå

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

Course syllabus for HI105X valid from Autumn 2008

## Grading scale

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

## Education cycle

First cycle

### Main field of study

Technology

### Specific prerequisites

At least 120 credits of courses must be passed on the education program. The student must also have passed the relevant courses upon who the project work is based.

## Language of instruction

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

#### Intended learning outcomes

That the student should independently apply the engineering knowledge that has been acquired during the education.

After the course, the student should:

- be able to apply knowledge and skills that have been acquired during the education on real problems
- independently be able to analyze and process a larger problem within the field of technology
- show ability to reflect around, evaluate and critically review the student's own and other people's results
- be able to document and present his/her work to a given target group with high requirements on structure, formalities and language usage
- be able to write an abstract of a report in English with correct usage of the terminology of the subject
- show ability to identify his/her need of additional knowledge and to continuously develop his/her skills

#### **Course contents**

The work should comprise problems that give a deeper and/or broader knowledge within the field of technology. The work is normally done at a workplace outside KTH. During the work the student is supervised both from a supervisor at KTH and from the employer.

## Disposition

The work is done individually or in a group of two students. If the group consists of two students the examiner must make sure that the work of each student fulfils the demands on an individual work. The work is presented with a written report and an oral presentation in Swedish or English. Depending on the demands from the education program that the student is taking there may be requirements on opposition, i.e. the student should be opponent to another student's work and also have an opponent at his/her own presentation. The degree project will be graded based on three categories:

- The work process
- The engineering-related and scientific content

• Presentation

In order to pass the course all three criteria must be met with a grade of sufficient or better. The final grade will be given by the examiner based on all criteria after that the written report has been controlled against plagiarism.

### **Course literature**

The student is expected to find relevant literature for the project by him/herself. Suggestions for relevant literature may also be given by the supervisor or examiner.

### Examination

- XUP1 Account, 11.0 credits, grading scale: P, F
- XUP2 Concluding Account, 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.

Planning and carrying out the work according to the time plan, written report and oral presentation.

- XUP1 Account, 11.0 credits, grade scale: P, F
- XUP2 Concluding Account, 4.0 credits, grade scale: P, F

The scale for the final grade is A-F. The grade will be given by the examiner after that the written report has been controlled against plagiarism.

## 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.