



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

TIA106 Graphical Interfaces, 7.5 credits

Graphical Interfaces, 7,5 högskolepoäng

Second Cycle

Confirmation

This course syllabus was confirmed by The IT Faculty Board on 2011-02-15 and was last revised on 2018-02-09 by Department of Computer Science and Engineering to be valid from 2018-08-19, autumn semester of 2018.

Field of education: Science 100%

Department: Department of Computer Science and Engineering

Position in the educational system

The course is provided as a part of the Computer Science Master's Programme N2COS. The course is also offered as a programme course in the Computer Science Bachelors Programme N1COS. Please note the entrance qualifications for programme students in N1COS below for this course. The course is also offered as a single subject course.

The course can be part of the following programmes: 1) Computer Science, Master's Programme (N2COS), 2) Applied Data Science Master's Programme (N2ADS) and 3) Computer Science, Bachelor's Programme (N1COS)

Main field of studies

Computer Science

Interaction Design

Specialization

A1N, Second cycle, has only first-cycle course/s as entry requirements

A1N, Second cycle, has only first-cycle course/s as entry requirements

Entry requirements

To be eligible for the course the student must have a Bachelor degree of 180 hec. Additionally, the course TIG095 Human Computer Interaction 7.5 credits, or the equivalent is required.

To be eligible for this course as a programme student in Science Bachelors Programme NICOS, the student must have passed at least 90 credits in programme courses and the additional course TIG095 Human Computer Interaction 7.5 credits.

Learning outcomes

After completing the course the student is expected to be able to:

Knowledge and understanding

- adapt a graphical interfaces towards use and users,
- use different graphical interface elements,
- use keypaths and scenarios to create an interaction sequence,
- apply commonly used interaction design solutions for graphical interfaces,
- utilize wireframes to create a layout of a graphical interface.

Skills and abilities

- design a graphical user interface adapted to a specific use and user in terms of: layout, interaction sequence, correct use of controls and look and feel.

Judgement and approach

- solve interaction design problems related to graphical interfaces and motivate yoursolutions,
- design a relatively complex graphic interface, and be able to provide a valid design rationale for it,
- understand the difference between different platforms; their constraints and possibilities,
- select and apply previous existing design solutions to new graphical interfaces,
- based on a scenario, extract a user's needs in terms of graphical interface solutions.

Course content

The course is highly practical. Lectures and literature give a theoretical foundation, but this theory is immediately put into practice in a series of small exercises and a few larger projects. When practicing, focus is upon motivating, making and analyzing the design decisions made. Most of the work is done in groups of various sizes but there is also a significant amount of individual work. Content includes:

- Commonly used interaction design solutions in graphical interfaces
- Designing for users on different levels (e.g. beginners vs. experts)
- Keypaths and scenarios
- Designing interaction sequences
- The process from task to graphical user interface design
- Layout of graphical user interfaces; wireframing

- Designing look and feel; using color, text and graphics
- Correct use of graphical user interface elements such as controls, toolbars, menus, dialogues etc.
- Designing for smart phones and other non-traditional graphical interfaces

Form of teaching

Language of instruction: English

Assessment

The course is examined through three modules, namely:

1. Group-based lab exercise 2 credits (Pass with Distinction/Pass/Fail) and
2. Individual written exam that takes place in an examination hall 2 credits (Pass with Distinction/Pass/Fail)
3. Individual design project 3,5 credits (Pass with Distinction/Pass/Fail)

Grades

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

In order to receive Pass on the entire course, the student needs to receive at least Pass on all three modules. In order to receive Pass with Distinction (VG) the student must receive Pass with Distinction on at least two modules.

Course evaluation

After completion of the course the students are to be given the possibility of participating in course anonymously. As far as possible, evaluations are to be completed electronically. Continuous evaluation will be used, including three meetings between teacher(s) and student representatives. Additionally, the course will be evaluated with a course questionnaire, and discussed with the student representatives.

Additional information

It is recommended that students completed the course TIA108 Prototyping in Interaction Design.