



Faculty of Economic Sciences, Communication and IT  
Computer Science

## Syllabus

### Course Approval

The syllabus was approved by the Faculty Board of Economic Sciences, Communication and IT on 20 May 2009, and is valid from the Spring semester of 2009 at Karlstad University.

**Course Code:** DVGA11

**Graphical User Interfaces, 7.5 ECTS Credits**

**(Grafiska Användargränssnitt, 7.5 Swedish credit points)**

**Degree Level:** Bachelor

**Increasingly In-depth Study:** G1F (First cycle, has less than 60 credits in first-cycle course/s as entry requirements)

### Language of Instruction

Swedish

### Prerequisites

The course DVGA09 Software Development and Design, 7.5 ECTS cr or DVGA02 Software Development Methodology, 7.5 ECTS cr, or equivalent

### Major Field of Study

DVA (Computer Science)

### Learning Outcomes

Upon completion of the course, students should be able to:

- explain the design and construction of graphical user interfaces,
- develop graphical user interfaces in several modern window operating systems,
- give an account of user interface events and their implementation in different environments,
- demonstrate understanding of user needs of graphical user interfaces, and
- demonstrate understanding of the Model View Controller concept (MVC) and ability to apply it in practice.

### Content and Form of Instruction

The course deals with the design of graphical screen images and user dialogues as well as principles of interface events and window operating systems. The main focus is on the implementation of interface in a computer environment, but also includes aesthetical, social and international perspectives on interface development. There are exercises and laboratory assignments designed to clarify the principles of design and construction of graphical user interfaces based on modern window operating systems. Students work on laboratory assignments in two or more environments to demonstrate the similarities and dissimilarities in practical interface design.

### Reading List

See separate document.

### Examination

Examination is in the form of oral and written reports on laboratory and exercise assignments and a written exam.

#### Grades

One of the grades 5 (Distinction), 4 (Some Distinction), 3 Pass , or Fail (U), is awarded in the examination of the course and its modules.

#### Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course assessment is based on student views and experiences as reported in written course evaluations and/or group discussions. Students will be informed of the result of the evaluation and of the measures to be taken.

#### Course Certificate

A course certificate will be provided upon request.

#### Additional Information

Students who enrolled before 1 July 2007 will complete their studies in accordance with the requirements of the earlier admission. Upon completion students may request degree and course certificates to be issued under the current ordinance if they meet its requirements.

The local regulations for studies at the Bachelor's and Master's levels at Karlstad University stipulate the obligations and rights of students and staff.

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