



## Course syllabus

Faculty Board of Science and Engineering

School of Computer Science, Physics and Mathematics

4IK006 Modelling av verksamhetsobjekt, 7,5 högskolepoäng

4IK006 Enterprise Object Modelling, 7.5 credits

### **Main field of study**

Informatics

### **Subject Group**

Informatics/Computer and Systems Sciences

### **Level of classification**

Second Level

### **Progression**

A1N

### **Date of Ratification**

Approved by School of Computer Science, Physics and Mathematics 2012-08-17

The course syllabus is valid from spring semester 2013

### **Prerequisites**

At least 60 credits in Informatics, including a degree project at Bachelor level, 15 credits or equivalent.

Alternatively, documented experience in object orientation in the workplace.

## Objectives

The overall aim for the course is to introduce, discuss and work with object oriented system development from an architectural point of view.

This will be done from a high level with Enterprise Architecture, over analysis patterns and down to design patterns.

There will be focus on the higher levels as this is not a technical course as such.

After the course, the student:

- should understand different architectural patterns for object orientation
- should understand and use analysis patterns in object orientation
- should understand design patterns in object orientation

## Content

Modern systems development with a focus on object oriented frameworks and architectures such as Client-Server and Model-View-Control is the content of the course.

As the course is not technical as such, a lot of the work will be done by way of object oriented modelling in UML of the different architectures.

The student will learn about:

- the notion *Enterprise Architecture* and its use in constructing modern IT-based systems
- the use of analysis patterns to make reuse of concepts easier on a high level
- discussing design patterns to make reuse easier on a lower level

## Type of Instruction

Lectures and seminars. In addition, mandatory seminars, to be solved individually or in groups.

Students are expected to actively participate in various learning activities, contribute with their own work and discussions with teachers and other students.

In addition, students are expected to actively seek and use relevant literature on the performance of mandatory assignment.

## Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

Assessment of student performance is made through written test and/or oral examinations and/or presentation of mandatory assignments. The assessment method is decided at the start of the course.

Students who do not pass the regular examination will be offered retrials close to the regular examination.

On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.

## Course Evaluation

A course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The result of the course evaluation will be filed at the department.

## Required Reading and Additional Study Material

### Required Reading

Bernard, Scott, *An Introduction to Enterprise Architecture*, AuthorHouse, 2005

Fowler, Martin, *Analysis Patterns: Reusable Object Models*, Addison-Wesley Professional, 1996

Scientific journal papers