



Course syllabus

Faculty of Technology
Department of Computer Science

2DV603 Programvaruteknik - Design, 15 högskolepoäng
Software Engineering - Design, 15 credits

Main field of study

Computer Science

Subject Group

Informatics/Computer and Systems Sciences

Level of classification

First Level

Progression

G2F

Date of Ratification

Approved by Faculty of Technology 2015-05-22
The course syllabus is valid from spring semester 2016

Prerequisites

(1DV101), Object Oriented Software Engineering, 15 credits or (1DV102), Software Engineering - Procecess, 15 credits or equivalent

Objectives

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

- describe and explain concepts and advanced software design principles
- describe and explain basic concepts, principles, and techniques for requirements engineering
- describe and explain basic concepts, principles, and techniques for software verification and validation
- master advanced design principles.

Content

Course contents:

- software development processes
- software engineering project
- software architecture and design patterns
- requirements engineering techniques
- verification and validation techniques.

Type of Instruction

Teaching consists of lectures, seminars and practical work. Practical work is carried out in groups. Attendance at some activities is mandatory.

Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail (i.e. received the grade F).

The examination consists of a development project and a number of assignments.

Course Evaluation

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty.

Credit Overlap

This course cannot be part of a degree in combination with another course in which the content fully or partly correspond to the content of this course: 2DV103 Software Engineering - Design, 15 credits

Other

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

Required Reading and Additional Study Material

Required reading

Robillard, P.N. et al, *Software Engineering Process with the UPEDU*, Addison-Wesley, Boston, 2003. Pages 250 (300).