



Course syllabus

Faculty Board of Science and Engineering
School of Computer Science, Physics and Mathematics

4DV110 Adaptiva mjukvarusystem, 7,5 högskolepoäng
Adaptive Software Systems, 7.5 credits

Main field of study

Computer Science

Subject Group

Informatics/Computer and Systems Sciences

Level of classification

Second Level

Progression

A1F

Date of Ratification

Approved by the Board of the School of Computer Science, Physics and Mathematics
2011-11-25

The course syllabus is valid from autumn semester 2012

Prerequisites

90 credits in Computer Science or equivalent.

Objectives

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

- understand the basic principles of adaptive software systems
- understand the role of software architecture in adaptive software systems
- critically evaluate research studies of adaptive software systems
- design an adaptive software system
- implement an adaptive software system.

Content

The course gives an overview of adaptive software systems and explains the central role of software architecture for adaptive systems. Students will study and critically examine research studies of adaptive software systems. Students will have the opportunity to get hands-on experience from designing and implementing an adaptive software system.

The course covers the following topics:

- introduction to adaptive software systems
- models, architectures and framework for adaptive systems

- evaluation of research studies of adaptive systems
- design of an adaptive software system
- hands-on experience with implementing an adaptive system

Type of Instruction

Lectures, seminars, self-studies, discussions, assignments, controlled exercises.

Examination

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

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.

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.

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.

Other

Upon request, a Swedish University degree will be issued upon successful completion of the full demands for that degree.

Upon request, a Swedish University course certificate will be issued upon successful completion of the course.

Required Reading and Additional Study Material

Required reading

Relevant literature will be selected together with the supervisor and examiner.