



COMPUTER SCIENCE AND ENGINEERING

DIT543 Software Engineering Project, 7.5 higher education credits

Software Engineering Project, 7,5 högskolepoäng

First Cycle

Confirmation

The course syllabus was confirmed by The IT Faculty Board on 2011-10-19 and was last revised on 2014-10-23 by Department of Computer Science and Engineering to be valid from 2015-08-30, autumn semester of 2015.

Field of education: Science 100%

Department: Computer Science and Engineering

Position in the educational system

The course is offered within the framework of several degree programmes. The course is also a single subject course at the University of Gothenburg.

The course is part of the following programmes: 1) Computer Science, Master's Programme and 2) Computer Science, Bachelor's Programme

Main field of studies

Computer Science

Specialization

G2F, First Cycle, has at least 60 credits in first-cycle course/s as entry requirements

Entry requirements

The student must have successfully completed DIT950 Programming, Advanced Course or equivalent, and either DIT011 Object-oriented Software Development or DIT440 Introduction to Functional Programming, or equivalent.

Learning outcomes

After completion of the course the student is expected to be able to:

Knowledge and understanding

- identify the complexities of software design and development
- describe the fundamentals of software engineering, such as stakeholders and requirements
- describe the difference between the Customer, the Solution, and the Endeavour as well as the different methods used for each.

Skills and abilities

- elicitate requirements from and design a solution to a real-world problem
- plan and execute a small software development project in a team
- apply skills from programming courses and other relevant courses in a project-like environment
- learn new tools and APIs on their own

Judgement and approach

- reflect on the choice of software engineering methods used in the project

Course content

The course provides a practical introduction to Software Engineering. Students work in teams to learn to apply concepts from software engineering, such as requirement elicitation or processes, as well as how to organize and manage a team. A series of lectures introduce software engineering concepts on a theoretical level as well as (technical) background to the task the students are to solve and the tools required. It is up to every team to adapt the theory and use the tools to define their own way of working.

Form of teaching

The course is organized as a project where the students work in teams of usually six students to address a real-world software engineering task. The teams have weekly supervision meetings. The project is supplemented by lectures that provide insight into the task the students are working on and software engineering in general.

Language of instruction: English

Assessment

The course is examined in two parts: a project deliverable (source code, binary, and documentation) and a final report that reflects on the project decisions and outcome. These together are weighted and scored on a scale 0 - 100. Detailed weights and grading criteria are available in the Course PM. The scores are set on a group level but are adjusted for individual contribution.

If a student, who has failed the same examined component twice, wishes to change examiner before the next examination, a written application shall be sent to the department responsible for the course and shall be granted unless there are special reasons to the contrary (Chapter 6, Section 22 of Higher Education Ordinance).

In cases where a course has been discontinued or has undergone major changes, the student shall normally be guaranteed at least three examination occasions (including the ordinary examination) during a period of at least one year from the last time the course was given.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U). To be awarded a Pass (G) for the course, the student needs to get at least 40% of the total score on the project (deliverable) and the final report. To be awarded a Pass with Distinction (VG) for the whole course, the student needs to get at least 80% of the total score on the project (deliverable) and the final report.

Course evaluation

The course is evaluated through meetings both during and after the course between teachers and student representatives. Further, an anonymous questionnaire is used to ensure written information. The outcome of the evaluations serves to improve the course by indicating which parts could be added, improved, changed or removed. The results of and possible changes to the course will be shared with students who participated in the evaluation and students who are starting the course.

Additional information

The course is a joint course together with Chalmers.