Program Development Project

Programme course

6 credits

Programmeringsprojekt

TDDI02

Valid from:

Determined by

Date determined

Main field of study
Computer Science and Engineering

Course level
First cycle

Advancement level
G1X

Course offered for
- Computer Engineering, B Sc in Engineering

Entry requirements
Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

Prerequisites
Being fluent in handling Unix systems. Good knowledge of programming. Basic knowledge of data structures and algorithms.

Intended learning outcomes
After completing this course students should:
- be able to describe the basic concepts and tasks within Software Engineering
- be able to model and design non trivial computer programs
- be able to give an account of the phases of a project, and utilize these in the planning a project of their own
- be able to in writing and orally describe the requirements, design, and implementation of a system, and independently analyze them
- be able to apply a given way of working in a small team
- be able to describe and analyze ethical aspects related to the subject

Course content

Overview of Software Engineering: basic concepts.
Project work: planning, methodology, phases, mile stones.
Documents: requirements and design specifications, user manuals, technical documents.
Oral presentation of program design and software product. The working conditions are quite free and demands good discipline, but the advisor will, if necesseray, guide and support the work.

Teaching and working methods

The course consits of a theory part and a project part. The theory part will provide knowledge necessary to implement the project, as well as an overview of the area of Software Engineering. The theory part also includes a seminary where related ethical aspects are discussed. The project part of the course consists of a small programming project carried out in groups of three students. During the project a number of documents should be produced, and the program design is to be presented at a seminar. The course is given during the whole semester.

Examination

UPG1	Active participation during seminary	0.5 credits	U, G
HEM1	Written home assignment	1 credits	U, G
PRA3	Oral and written presentation of projekt work	4.5 credits	U, G

Grades

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Department

Institutionen för datavetenskap

Director of Studies or equivalent

Ahmed Rezine

Examiner

Klas Arvidsson

Course website and other links

http://www.ida.liu.se/~TDDI02/

Education components

Preliminary scheduled hours: 23 h
Recommended self-study hours: 137 h

Course literature

D. Bell: Software Engineering for Students - A Programming Approach, 4th ed, Addison-Wesley, 2005.