

# Software Engineering - Company Project

Programme course

6 credits

Programutvecklingsmetodik - företagsprojekt

TDDD69

Valid from: 2017 Spring semester

**Determined by**

Board of Studies for Computer Science  
and Media Technology

**Date determined**

2017-01-25

## Main field of study

Information Technology, Computer Science and Engineering, Computer Science

## Course level

Second cycle

## Advancement level

A1X

## Course offered for

- Computer Science and Engineering, M Sc in Engineering
- Information Technology, M Sc in Engineering
- Computer Science and Software Engineering, M Sc in Engineering

## Specific information

This course is only for the LiU-students of the double degree program with Harbin Institute of Technology.

## 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

Basic programming experience in Java. Basic knowledge in UNIX. Basic knowledge in object-orientation, algorithms, data structures and databases.

## Intended learning outcomes

The purpose of the course is that the students shall acquire good knowledge in large-scale software engineering. After the course the students shall be able to:

- specify, model, implement and test a smaller software system
- define, plan and execute a development project in a group of about 30 students, where several smaller groups can be formed.
- elicit, analyze and document experience from the own development project

## Course content

Software development methodology, processes, leadership, team organization, written and oral presentation

## Teaching and working methods

The course contains seminars and practical exercises. The project is organized by grouping the students into teams where the members work together to perform a development project with a fictitious or real customer who states the requirements. The project aims to give students practical experience in the different steps in a development process: feasibility study, requirements specification, system design, detailed design, implementation, integration, testing, and deployment. Iterative development methods are used. The course runs the entire semester. The seminars are project status meetings and give the students an opportunity to train presentation technique and to coordinate and discuss project progress. Presence is mandatory.

The course runs over the entire autumn semester.

If there is a real customer the students will be required to sign agreements with the client about the secrecy and the right of exploitation, that are in line with the wishes of the customer.

## Examination

PRA1	Project work	6 credits	U, 3, 4, 5
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## Grades

Four-grade scale, LiU, U, 3, 4, 5

## Other information

### Supplementary courses

Advanced courses in Software Engineering

## Department

Institutionen för datavetenskap

## Director of Studies or equivalent

Ahmed Rezine

## Examiner

Kristian Sandahl

## Course website and other links

<http://www.ida.liu.se/~TDDD69/>

## Education components

Preliminary scheduled hours: 27 h

Recommended self-study hours: 133 h

## Course literature

### Additional literature

#### Other

The participant can choose books on their own in dialogue with the tutor and other group members. For background we recommend: Pfleeger, S.L. and Atlee, J.M. (2010). Software Engineering - Theory and Practice. 4th edition Pearson International. ISBN 0-13-814181-9

## Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at [http://stydokument.liu.se/Regelsamling/Innehall/Utbildning\\_pa\\_grund-\\_och\\_avancerad\\_niva](http://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva).