



COURSE SYLLABUS

Seminarier i Programvaruteknik

Seminar Series in Software Engineering

7,5 ECTS credit points (7,5 högskolepoäng)

Course code: PA2550

Educational level: Second cycle

Course level: A1N

Field of education: Technology

Subject group: Computer Technology

Subject area: Software Engineering

Version: 5

Applies from: 2017-08-28

Approved: 2017-02-20

1 Course title and credit points

The course is titled Seminar Series in Software Engineering/Seminarier i Programvaruteknik and awards 7,5 ECTS credits. One credit point (högskolepoäng) corresponds to one credit point in the European Credit Transfer System (ECTS).

2 Decision and approval

This course is established by Dean 2016-09-01. The course syllabus was revised by Head of Department of Software Engineering and applies from 2017-08-28.

Reg.no:BTH-4.1.1-0164-2017

3 Objectives

The purpose of this course is to offer an introduction and an overview of the subject area software engineering, insight into contemporary research in software engineering, and practical exercise in basic software engineering skills.

4 Content

The course offers an introduction and an overview of the subject area software engineering, insight into contemporary research in software engineering, and practical exercise in basic software engineering skills. The course is conducted partly as a series of seminars, and partly as lab exercises.

5 Aims and learning outcomes

Knowledge and understanding

On completion of the course the student should be able to:

- Present an overview of the subject area software engineering, e.g. using SWEBOK as a starting point.
- Present an overview of contemporary research in software engineering
- On a superficial level reason around research methodologies suitable for software engineering research.
- Present an overview of and on a superficial level

reason about different development methodologies, including their strengths and weaknesses.

Skills and abilities

On completion of the course the student should be able to:

- Independently create simple programmes in a programming language of choice.
- Independently plan and conduct testing of simpler programs.
- Independently create a design for a simpler program, and reason in depth about the use of design patterns.
- In a small team plan and set up a simple database and create a program that uses the database

Values and attitudes

On completion of the course the student should be able to:

- In a team reason about a given design and identify opportunities for improvements.

6 Learning and teaching

The course is conducted partly as a series of seminars with invited guest lecturers, and partly as practical exercises in a lab room. Examination of lab exercises is done continuously throughout the course.

English

7 Assessment and grading

Examination of the course

Code	Module	Credit	Grade
1710	Reports	2 ECTS	G-U
1720	Lab Exercises	5.5 ECTS	G-U

The course will be graded G Pass, UX Fail, supplementation required, U Fail.

8 Course evaluation

The course coordinator is responsible for systematically gathering feedback from the students in course evaluations and making sure that the

results of these feed back into the development of the course.

9 Prerequisites

Completed courses of at least 120 ECTS credits of which 90 credits must be in the following areas: Software Engineering, Computer Science. At least 30 credits must be in one or more of the following areas: Programming, Object-oriented Systems, Software Design, Data Structures and Algorithms, Database Technology, Data Communications, Real Time Systems, Operating Systems. In addition, a completed course of at least 7.5 credits in Software Engineering or a Team Software Engineering Project is required.

10 Field of education and subject area

The course is part of the field of education and is included in the subject area Software Engineering.

11 Restrictions regarding degree

The course cannot form part of a degree with another course, the content of which completely or partly corresponds with the contents of this course.

12 Course literature and other teaching material

I. Sommerville, Software Engineering, 10th Edition, Pearson, 2015.

