



# COURSE SYLLABUS

## Grundläggande systemverifiering

### Basic System Verification

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

**Course code:** PA1417

**Educational level:** First cycle

**Course level:** G1F

**Field of education:** Technology

**Subject group:** Computer Technology

**Subject area:** Software Engineering

**Version:** 9

**Applies from:** 2014-02-17

**Approved:** 2014-02-17

#### 1 Course title and credit points

The course is titled Basic System Verification/Grundläggande systemverifiering 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 Head of Department of Software Engineering 2014-02-17. The course syllabus was revised by Head of Department of Software Engineering and applies from 2014-02-17.

#### 3 Objectives

The course aims to introduce system verification and testing. The course deals with test methods, strategies and test environment. It also includes a discussion about how testing groups can be organized and how the test group works with other parts of the system development group. Testing of software systems is a complex and important part in getting a working system delivered to users. Expertise in system verification and testing is and will be sought after.

#### 4 Content

The course includes the following topics:

- Theory and practice of testing
- Terminology
- Standards
- Testing Methodology
- Testing Tools
- Test Planning
- Testing group
- Communication of results
- Test Environment
- Testing Objectives

#### 5 Aims and learning outcomes

After completion of the course the student will :

- understand what testing, testing organization, and

testing competence means.

- be able to account for different test methods.
- be able to put together a test instruction from a number of known requirements
- be able to describe the testing process elements
- be able to formulate a test strategy and testing plan with justification to the choices made??.
- be able to perform testing according to testing instruction
- be able to follow a test plan

#### 6 Generic skills

Following generic skills are trained in the course:

- @ @ Information Literacy
- @ @ Problem Solving
- @ @ Ability to work in groups

#### 7 Learning and teaching

The course consists of lectures, seminars and laboratory sessions. Lectures and seminars aims to introduce the topic and promote understanding of the techniques, limitations and also used terminology in the field. The laboratory work is intended to provide practical insight in the technologies addressed in this course.  
Swedish

#### 8 Assessment and grading

##### Examination of the course

| Code | Module       | Credit   | Grade |
|------|--------------|----------|-------|
|      | Written Exam | 2.5 ECTS | G-U   |
|      | Laboration 1 | 2.5 ECTS | G-U   |
|      | Laboration 2 | 2.5 ECTS | G-U   |

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

#### 9 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.

#### **10 Prerequisites**

For admission to the course Programming 15 credits or equivalent is required.

#### **11 Field of education and subject area**

The course is part of the field of education and is included in the subject area Software Engineering. The course can also be included in the subject area Computer Science.

#### **12 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. The course cannot be included in a degree with another course, which contents completely or partly corresponds with the contents of this course.

#### **13 Additional information**

Replaces PA1401.

#### **14 Course literature and other teaching material**

Författare: Black et al

Titel: Foundation of Software Testing: ISTQB Certification

Förlag: Cengage Learning EMEA

Utgiven: 2012

Antal sidor: 272

ISBN10: 1408044056

ISBN13: 9781408044056

