Blekinge Institute of Technology
Department of Software Engineering

Revision: 5
Reg.no:

COURSE SYLLABUS

Fördjupningskurs i Programvaruteknik

Advanced Topic in Software Engineering

7.5 credits (7,5 högskolepoäng)

Course code: PA2560
Main field of study: Software Engineering
Disciplinary domain: Technology
Education level: Second cycle
Specialization: A1F - Second cycle, has second cycle course/s as entry requirements

Subject area: Computer Technology
Language of instruction: English
Applies from: 2018-01-15
Approved: 2018-03-01

1. Decision

This course is established by Dean 2016-08-30. The course syllabus is approved by Head of Department of Software Engineering 2018-03-01 and applies from 2018-01-15.

2. Entry requirements

Completed courses of at least 150 ECTS credits of which 90 credits must be in the following areas: Software Engineering, Computer Science. In addition, completed courses of at least 30 credits at advanced level (second cycle), a completed course of at least 7.5 credits in Software Engineering or a Team Software Engineering Project and followed a Research Methods course of at least 7.5 credits are required.

3. Objective and content

3.1 Objective

The purpose of the course is to offer students a possibility to enrich their knowledge and their understanding within a specific topic in the subject area software engineering. The students embiggens their knowledge about current research and state of the art in the specific topic as a preparation for a upcoming masters thesis or to extend their knowledge about a topic not part of the regular course offering.

3.2 Content

The course comprises research into a topic within the area of software engineering. The topic is jointly decided by the student and supervisor or lecturer/course examiner.

4. Learning outcomes

The following learning outcomes are examined in the course:

4.1 Knowledge and understanding

On completion of the course, the student will be able to:
On completion of the course the student will:
• Display advanced knowledge of a specific area in software engineering.

4.2 Competence and skills

On completion of the course, the student will be able to:
On completion of the course the student will:
• Display ability to define a smaller research project in order to, in the best way answer a specific research question.
• Display ability to conduct a smaller research project.
• Display ability to write a scientific text.

Judgment and approach
On completion of the course the student will:
• Be able to reason about current knowledhe and known challenges and solutions in the specific research topic chosen during the course.
• Be able to reason about the suitability of different research methodologies to answer a specific research question.

5. Learning activities

The course consists of lectures, seminars, and a final presentation seminar. The education is mainly conducted through independent work with supervision, which is performed in seminar form.

6. Assessment and grading

Modes of examinations of the course

Code	Module	Credits	Grade
1805	Seminars	3 credits	GU
1815	Report	4.5 credits	AF

The course will be graded A Excellent, B Very good, C Good, D Satisfactory, E Sufficient, FX Fail, supplementation required, F Fail.

The course information for each course revision should include the assessment criteria and make explicit in which modes of examination that the learning outcomes are assessed.

7. Course evaluation

The course evaluation should be carried out in line with BTH:s course evaluation template and process.

8. Restrictions regarding degree

The course can form part of a degree but not together with another course the content of which completely or partly corresponds with the contents of this course.

9. Course literature and other materials of instruction

Projects in Computing and Information Systems – A Student's Guide, 3rd Edition
Författare: Christian Dawson
Förlag: AddisonWelsey
Utgiven: 2015, Antal sidor: 320
ISBN13: 9781292073460

Reference literature:
1. Real World Research, 4th Edition
Författare: C. Robson, K. McCartan
Förlag: Wiley
Utgiven: 2016, Antal sidor: 560
ISBN: 9781118745236

2. The Research Methods Knowledge Base, 4th Edition
Författare: W.M.K. Trochim, J. P. Donnelly, K. Arora
Förlag: Cengage Learning
Utgiven: 2006, Antal sidor: 444
ISBN: 9781133954774

3. Experimentation in Software Engineering – An Introduction; 2nd Edition
Författare: C. Wohlin, P. Runeson, M. Höst, M.C.
Ohlsson, B. Regnell, A. Wesslén
Förlag: Springer Verlag
Utgiven: 2012, Antal sidor: 250
ISBN13: 9783642290435