Blekinge Institute of Technology
Department of Software Engineering

Revision: 2
Reg.no: BTH-4.1.1-0090-2018

COURSE SYLLABUS

Människan och gruppen i mjukvaruutveckling

Behavioural Software Engineering

5 credits (5 högskolepoäng)

Course code: PA2566
Main field of study: Software Engineering
Disciplinary domain: Technology
Education level: Second cycle
Specialization: A1N - Second cycle, has only first cycle course/s as entry requirements

Subject area: Computer Technology
Language of instruction: English
Applies from: 2018-08-01
Approved: 2018-03-21
Discontinued: 2019-12-17

1. Decision

This course is established by Dean 2018-02-01. The course syllabus is approved by Head of Department of Software Engineering 2018-03-21 and applies from 2018-08-01.

2. Entry requirements

Admission to the course requires at least 120 credits of which 90 credits in a technical subject and a minimum of 2 years professional experience in software development (shown by, for example, a work certificate from an employer).

3. Objective and content

3.1 Objective

The purpose of this course is to better understand humans that are key in making software projects successful. It includes an understanding of behavior and social aspects of humans as individuals or groups that participate in and drive software engineering. This course complements the technology and process focus that dominates the software engineering area today. The focus is on the individuals and groups in software development and results at the organizational level are briefly covered. Those that participate in this course will gain knowledge that will help them to better cater to the needs of their colleagues as well as employees, build on their strengths as well as overcome their weaknesses, and in turn it helps increase the chances of running successful software projects.

3.2 Content

The course comprises six modules:

- Introduction to Behavioural Software Engineering: Definitions, concepts, and motivations.
- Individuals: Personality and cognitive biases, their effects, and related indicators / measures.
- Individuals: Models for motivation and attitudes.
- Individuals: Concepts for experience and emotion.
- Groups: Norms and creativity within software development.
- Politics, happiness, and freedom in software organisations for software engineers.

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:

- explain and discuss the importance of Behavioural Software Engineering and how it differs from classical software engineering,
- explain and discuss the effects of personality and cognitive biases in relation to software engineering.

4.2 Competence and skills

On completion of the course, the student will be able to:

- discuss and apply models for norms and motivation in software development,
- give examples of and discuss creativity, as well as creativity enhancement techniques, in software development.

4.3 Judgement and approach

On completion of the course, the student will be able to:

- critically reflect on their own experience with regards to behaviour and social aspects as individuals and within groups,
- reflect on the emotions that software developers experience and how they impact a project,
- identify, discuss, and critically reflect on political behaviour in their software organisation.

5. Learning activities

The teaching within each module is organised around research articles, pre-recorded lectures and written materials on key topics, and mandatory assignments. Two optional campus days with workshops and seminars will take place. Throughout the course, communication with teaching staff and fellow participants will take place through email and the course's online learning platform for discussions and feedback.

6. Assessment and grading

Modes of examinations of the course

Code	Module	Credits	Grade
1810	Assignments	5 credits	GU

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

A compilation of video lectures, written materials, and research reports are available on the course's online learning platform.

10. Additional information

This course replaces the course PA2545