Course title: Advanced topics in software engineering (ID014)

Lecturer(s): Zoran D. Budimac

Status: (obligatory/elective): Elective

ECTS: 7

Requirements: None

Learning objectives

The goal of the course is to enablean insight into newest research directions and achievements in the field of software engineering that are not covered in the other courses at doctoral studies.

Learning outcome

The successful students will be able to:

- Appreciate and critically evaluate the need for a learning of new theories, models, technićues, and technologies as they appear.
- Critically evaluate the necessity for continual professional development and application of newest research achievements in the practice
- Apply research methods in the filed that is covered in the course

Syllabus

Theory

Theoretical foundations of the newest research directions and achievements in the field of software engineering. Technologies and software tools that might be used in the practical applications as well as principles f their usage.

Practice

Using software tools foe modeling or implementation in the field covered in the course.

Recommended literature

According to recommendation of the teacher and depending of the covered topics in the course. Typically: journal article or articles from the conference proceedings that are covering the chosen topics.

Weekly teaching load	Lectures: 2	Student research: 0

Teaching methodology

During lectures classical educational methods are used with the use of projector. Students independently deal with some research topics, present and discuss results to other students and to a teacher. Results are finally described formally in the form of seminar paper.

Grading method (maximal number of points 100)

Exam entering requirements: 50 points for design of a seminar paper. Additional 50 points student can get by finishing and formal presentation of the seminar paper.