Course Unit Descriptor

Study Programme: Ph.D. in Computer Science

Course Unit Title: Advanced Topics in Software Engineering

Course Unit Code: ID014

Name of Lecturer(s): Zoran Budimac, Gordana Rakić

Type and Level of Studies: Doctoral Academic Degree

Course Status (compulsory/elective): Elective

Semester (winter/summer): Summer

Language of instruction: Serbian (primary), English (secondary)

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated: 7

Prerequisites: None

Course Aims:

The goal of the course is to enable ean 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 Outcomes:

The successful students will be able to:

- Appreciate and critically evaluate the need for a learning of new theories, models, techniques, 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 field 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.

Required Reading:

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 Contact Hours: 2 Lectures: 2 Practical work: 0

Teaching Methods:

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.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	Points 50	Final exam	Points 50
Active class		written exam	
participation		written exam	
Practical work		oral exam	
Preliminary exam(s)			
Seminar(s)			

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam,

project presentation, seminars, etc.							