Study programme(s): Information Technologies

Level: Master

Course title: Advanced Topics in Software Engineering

Lecturer: Gordana Rakić

Status: elective

ECTS: 7

Requirements: -

Learning objectives

The course covers recently developed areas and achievements in software engineering that are not covered in other courses of the curriculum

Learning outcomes

Minimal: At the of the course a successful student will be able to demonstrate knowledge on recently developed areas in software engineering

Optimal: At the of the course a successful student will be able to demonstrate deep understanding of recently developed areas in software engineering and discuss possible applications on a real-life example.

Syllabus

Theoretical instruction

Theoretical foundations of recent fields and achievements in software engineering. Technologies and software tools that might be used in practical applications. Principles of their usage.

Practical instruction

Using appropriate software tools on illustrative examples to exercise covered principles and to better grasp possible usages of recent developments in practice.

Literature

Recommended by lecturer, depending on chosen topics that will be covered during the course.

Weekly teaching load				
Lectures: 2	Exercises: 1	Practical Exercises: 2	Student research:	Other:

Teaching methodology

At lectures, classical methodology is applied, through usage of a beam-projector. During exercises, a case studies are more deeply analyzed. Some aspects and principles are practically covered by software tools. Students build on their knowledge by researching each of the topics and the knowledge is checked through the creation of papers that are presented during and at the end of the course.

Grading method (maximal number of points 100)

Pre-exam obligations	**points**	**Final exam**	**points**
Practical assignments	60	Final project with defense	40