Study programme(s): Informatics (IM)

Level: master

**Course title:** Advanced topics in software engineering (IB335)

Lecturers: Zoran D. Budimac, Danijela D. Tešendić

Status: elective ECTS: 7,5

**Requirements**: None **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:* Students should be able to demonstrate knowledge on recently developed areas in software engineering.

*Optimal:* Students should 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 the recent fields and achievements in software engineering. Technologies and software tools that might be used in practical applications. Principles of their use.

Practical instruction

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

## Literature

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

Weekly teaching load				Other:
Lectures: 2	Exercises: 3	Other forms of	Student research:	
		teaching:		

## **Teaching methodology**

Classical teaching methods including the video-beam are applied in lectures. Case studies are more deeply analyzed during the exercises. Some aspects and principles are practically covered by software tools. Furthermore, students study individually and in-depth some of the covered topics and report on their findings in written papers.

Grading (maximum number of points 100)Pre-exam obligationspointsFinal exampointsActive participation in lecturesWritten examPractical instruction12Oral exam40Colloquia........Seminar(s)48