Study programme(s): Information Technology

Level: B.Sc.

Course title: Introduction to Software Quality

Lecturer: Gordana Rakić

Status: elective ECTS: 6

Requirements: -

## Learning objectives

The objective of this course is to provide students with theoretical background and applicability aspects of software quality. The course will guide students through characteristics of a quality software product and process. Students should adopt good practices in different phases of software development that lead to high quality.

#### **Learning outcomes**

Minimum: Students should be able to apply the obtained knowledge in the field of software quality through the software development process.

Desirable: Students should have good knowledge, the ability for critical analysis and application of knowledge in the field of software quality for a software product and process improvement.

## **Syllabus**

Theoretical instruction

Definitions of software quality, theoretical and practical perspectives on software quality, software quality characteristics, software quality monitoring and assurance, software quality modeling and measuring, software quality standards.

Practical instruction

Understanding and implementation of different software quality assurance techniques, and application of software quality measurement and improvement in software development process through case studies and practical assignments by utilization of adequate software tools.

#### Literature

Recommended

O'Regan, G., 2014. Introduction to software quality. In Undergraduate Topics in Computer Science, Springer.

Kan, S.H., 2002. Metrics and models in software quality engineering. Addison-Wesley Longman Publishing Co., Inc..

Weekly teaching load				
Lectures:	Exercises:	Practical Exercises:	Student research:	Other:
2	0	2		

# **Teaching methodology**

During lecture classes, the classical methods are used. Exercises are mostly consisting of case study analyses. Assignments are mostly practical, whose aim is to practically apply principles covered during lectures and exercises, using appropriate tools.

Grading method (maximal number of points 100)

Pre-exam obligations	points	Final exam	points
Partial assignments	60	Final project	40