Course Unit Descriptor

Study Programme: Information Technologies

Course Unit Title: Introduction to Software Quality

Course Unit Code: IT614

Name of Lecturer(s): Gordana Rakić

Type and Level of Studies: Bachelor Academic Deree

Course Status (compulsory/elective): Elective

Semester (winter/summer): Winter

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

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

Number of ECTS Allocated: 6

Prerequisites: None

Course Aims:

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:

Minimal

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:

Theory

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.

Practice

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.

Required Reading:

- 1. O'Regan, G., 2014. Introduction to software quality. In Undergraduate Topics in Computer Science, Springer.
- 2. Kan, S.H., 2002. Metrics and models in software quality engineering. Addison-Wesley Longman Publishing Co., Inc..

Weekly Contact Hours: 4 Lectures: 2 Practical work: 2

Teaching Methods:

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.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	Final exam	points
Active class	10	written exam	0
participation	10	written exam	
Practical work	30	oral exam	30
Preliminary exam(s)	0		
Seminar(s)	30		

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.