



Course unit Descriptor	Faculty of Economics Subotica	 UNIVERZITET U NOVOM SADU UNIVERSITY OF NOVI SAD
		
GENERAL INFORMATION		
Study program in which the course unit is offered	Business Informatics	
Course unit title	Software Testing and Deployment	
Course unit code	OSAPI12	
Type of course unit ¹	Compulsory	
Level of course unit ²	First	
Semester when the course unit is offered	Winter	
Year of study (if applicable)	Third	
Number of ECTS allocated	6	
Name of lecturer/lecturers	Vuk Vukovic	
Mode of course unit delivery ³	Face-to-Face	
Course unit pre-requisites (if any)	Structural programming	
PURPOSE AND OVERVIEW (max 5-10 sentences)		
<p>Ability to use the testing techniques to generate an optimal number of test cases for functional and structural testing of business software applications: Generating test cases by testing techniques belonging to the black box software testing method; Generating test cases by testing techniques belonging to the white box software testing method. Ability to create and execute test scripts in the functional test tool for Internet-oriented business software applications; Record script scenarios in the functional test tool for Internet-oriented business software applications; Execution and modification of tests in the tool for functional testing of Internet-oriented business software applications. Ability to carry out the deployment of a software product in the organization's production environment</p>		
LEARNING OUTCOMES (knowledge and skills)		
<p>Ability to:</p> <ul style="list-style-type: none"> • understand the basic terminology used in software testing • use black box software testing techniques • use white box software testing techniques • understand and use the functional testing tool for Internet-oriented business software applications 		

¹ Compulsory, optional

² First, second or third cycle (Bachelor, Master's, Doctoral)

³ Face-to-face, distance learning, etc.

- understand and use the tool for Internet-oriented business software applications deployment

SYLLABUS (outline and summary of topics)

Theory

Basic concepts of quality management and software testing; Theoretical aspects: techniques for testing software specification, boundary values analysis, equivalence class partitioning, combinatorial testing, testing technique for covering program statements, selections, conditions and loops; Software testing tools; Non-functional software testing: performance and usability of business software; Concepts of software product deployment.

Practice

Practical aspects: techniques for testing software specification, boundary values analysis, equivalence class partitioning, combinatorial testing, testing technique for covering program statements, selections, conditions and loops; tool for Internet-oriented business software applications functional testing; tool for Internet-oriented business software applications deployment.

LEARNING AND TEACHING (planned learning activities and teaching methods)

Lectures and students group work

REQUIRED READING

1. Copeland, L. (2004). A Practitioner's Guide to Software Test Design. Boston, London: Artech House Publishers.
2. Burns, D. (2012). Selenium 2 Testing Tools: Beginner's Guide. NJ: Packt Publishing.

ASSESSMENT METHODS AND CRITERIA

Practical work 30 points, Preliminary exam 30 points, Oral exam 40 points

LANGUAGE OF INSTRUCTION

English