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| Study program: INFORMATION TECHNOLOGY | | | |
| Type and level of studies: Undergraduated Academic Studies (first level of studies) | | | |
| Course unit: Software Testing | | | |
| Course lecturer: Olga Ristić | | | |
| Language of instruction: English | | | |
| ECTS: 6 | | | |
| Prerequisites: | | | |
| Semester: Fall | | | |
| Course unit objective Introducing students to apply recommended practices, methods, techniques and tools in the field of software testing. | | | |
| Learning outcomes of Course unit After completing the course students will be able to: perform manual software testing, automate testing process and write unit tests, perform analysis and selection testing tools, create test cases and conduct effective software testing. | | | |
| Course unit contents <i>Theoretical classes</i> - The concept of testing. Software testing in the software development process. Test Driven Development-TDD. Software analysis. Software bugs. Testing methods and levels. System Testing. Integration testing. Testing of individual software components. Top-down and bottom-up testing. Testing process management. Planning and conducting testing. Improving the testing process. Performance testing. Security testing. Testing of functional and non-functional requirements. Process automation testing. Defining user requirements, managing and testing in relation to them. Doubt in the test (in tool, test data, environment, request specification). Testing user interface, web applications and databases. <i>Practical classes</i> Students prepare for solving tasks of creating a software testing plan and test cases. Black box testing. White box testing. "Gray box" testing. Testing user interface. Web application testing. | | | |
| Literature 1. Mark Allen Weiss: Data Structures and Algorithm Analysis in Java, Florida International University, Publisher: Pearson, 2012, 614 p. 2. Michael Goodreach, Roberto Tamassia, Michael Goldwasser: Data Structures & Algorithms in Java, Wiley, 2014, 720 p. 3. Clifford A. Shaffer: A Practical Introduction to Data Structures and Algorithm Analysis, Prentice Hall, 2009, 601 p. | | | |
| Number of active teaching hours | | | Other classes |
| Lectures: 2 | Practice: 2 | Other forms of classes | |
| Examination methods (maximum 100 points) | | | |
| Exam prerequisites | No. of points: | Final exam | No. of points: |
| Student's activity during lectures | 10 | oral examination | - |
| Practical classes/tests | 30 | written examination | 30 |
| Seminars/homework | 30 | | |
| Project | - | | |
| Other | | | |
| Grading system | | | |
| Grade | No. of points | Description | |
| 10 | 91-100 | Excellent | |
| 9 | 81-90 | Exceptionally good | |
| 8 | 71-80 | Very good | |
| 7 | 61-70 | Good | |
| 6 | 51-60 | Passing | |
| 5 | less than 50 | Failing | |