

Faculty of International Economics and Administration
Department: Informatics
Professional Area: Informatics and Computer Studies
Major: Web design
Educational-and-qualification Degree: Master

COURSE DESCRIPTION

1. Course unit title: Evaluation and Optimization of Web Applications
2. Course unit code: INF 3027
3. Type of course unit: compulsory
4. Level of course unit: Master
5. Year of study: first
6. Semester: second
7. Number of ECTS credits allocated: 3
8. Name of lecturer: Prof. Teodora Bakardjieva, Phd, Assistant Prof. Veselina Spasova
9. Learning outcomes of the course unit: The course introduces postgraduates to theoretical approaches to assessing the quality of software. At the end of the course postgraduates will be able to apply different models for assessing the quality of software and work with metrics used in real projects. Postgraduates learn techniques for testing software applications and automation of the testing process. The course builds competencies in optimizing web applications.
10. Mode of delivery (face-to-face, distant): face-to-face
11. Prerequisites and co-requisites: Postgraduates are required to be familiar with the basic principles of the development of web applications.
12. Course contents: Software metrics – classification, examples. Object-oriented metrics; software quality evaluation - general concepts; models of software quality: Boehm's model, a typical hierarchical pattern, a classification model; software testing solutions; Basic files. Automation of the testing process; Purpose of files: a quality assurance plan, a test plan, test scenarios, tests' reports, open discrepancy report; testing tools.
13. Recommended or required reading:

Ескенази, А., Н. Манева. Софтуерни технологии. КЛМН, София, 2006.

Илиева, С., Вл. Лилов, И. Манова. Изграждане на софтуерни приложения. Университетско издателство „Св. Климент Охридски“, София, 2006.

Илиева, С., Вл. Лилов, И. Манова. Подходи и методи за реализация на софтуерни системи. Университетско издателство „Св. Климент Охридски“, София, 2010.
14. Planned learning activities and teaching methods: lectures and seminars
15. Assessment methods and criteria: a written exam - 40% of the final grade. Projects or practice – course assignment defence. The course assignment determines 40% of the final grade. The active work in class contributes to the determination of 20% of the final grade. Postgraduates are informed of the results of the continuous assessment and course assignments during their classes, contact hours or online.
16. Language of instruction: Bulgarian
17. Work placement: none