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| SOFTWARE QUALITY ASSURANCE (CSC501) - AI**Coordinator: Ampatzoglou Apostolos****Semester:** **8th** (Spring) | **Course type:** **Elective AI**  | **Weekly hours:** **3** | **ECTS:** **5****Instructors:** *Ampatzoglou Apostolos***General competences**On the successful completion of the course, the student will be able to: describe the basic notions of software quality describe the basic notions of software quality models apply software quality assessement approaches apply methods and tool for enhancing software quality describe advanced topics of software quality assurance (e.g., technical debt) and apply them in pracrtice**Course content** Introduction to software quality Software quality models and attributes Assessment of software quality at the source code level Assessment of software quality at the process level Assessment of software quality at the design level Assessment of software quality at the requirements level Design Patterns  Software refactorings Introduction to technical debt Technical debt management Software testing Software quality international standards**Assessment**The assessment will be perfromed based on: Written exams (60%) Team assignments (40%)Methods for written exams: Problem solvingThe criteria for the assessment are posted in the course website**Course bibliography**(One of the following):13600 ΑΝΤΙΚΕΙΜΕΝΟΣΤΡΕΦΗΣ ΣΧΕΔΙΑΣΗ: UML, ΑΡΧΕΣ, ΠΡΟΤΥΠΑ ΚΑΙ ΕΥΡΕΤΙΚΟΙ ΚΑΝΟΝΕΣ, Τύπος: Σύγγραμμα, ΑΛΕΞΑΝΔΡΟΣ Ν. ΧΑΤΖΗΓΕΩΡΓΙΟΥ, 2005, ΕΚΔΟΣΕΙΣ ΚΛΕΙΔΑΡΙΘΜΟΣ ΕΠΕ, ISBN: 960-209-882-113597 ΑΝΤΙΚΕΙΜΕΝΟΣΤΡΕΦΗΣ ΑΝΑΠΤΥΞΗ ΛΟΓΙΣΜΙΚΟΥ ΜΕ ΤΗ UML, Τύπος: Σύγγραμμα, ΒΑΣΙΛΗΣ ΓΕΡΟΓΙΑΝΝΗΣ, ΓΙΩΡΓΟΣ ΚΑΚΑΡΟΝΤΖΑΣ, ΑΧΙΛΛΕΑΣ ΚΑΜΕΑΣ, ΓΙΑΝΝΗΣ ΣΤΑΜΕΛΟΣ, ΠΑΝΟΣ ΦΙΤΣΙΛΗΣ, 2006, ΕΚΔΟΣΕΙΣ ΚΛΕΙΔΑΡΙΘΜΟΣ ΕΠΕ, ISBN: 960-209-913-5**Additional material**Related scientific journals: <https://www.sciencedirect.com/journal/information-and-software-technology> <https://www.sciencedirect.com/journal/journal-of-systems-and-software> <https://link.springer.com/journal/11219> |