|  |
| --- |
| 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 solving  The 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: 960-209-882-1  13597 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> |