

Software Testing is a survey course on concepts, principles, and techniques related to software testing and formal program verification. Students will become acquainted with both the strengths and limitations of various functional and structural testing methods, as well as techniques for proving the functional correctness of sequential programs. Topics include: black-box and white-box test case design strategies, incremental integration testing techniques, inspections and reviews. Students will have the opportunity to practice the techniques presented in lectures via optional exercises. As well as this course focuses on techniques for ensuring software quality. Here, quality assurance is viewed as an activity that runs through the entire development process: understanding the needs of clients and users; analyzing and documenting requirements; verifying and validating solutions through testing