

SYLLABUS  
PART I  
EDISON STATE COMMUNITY COLLEGE  
CIS 116S FOUNDATIONS OF SOFTWARE TESTING  
1 CREDIT HOUR

**COURSE DESCRIPTION**

Introduction to software testing using the latest standards established by the International Software Testing Qualifications Board. Fundamentals of testing, testing throughout the software development lifecycle, static testing, testing techniques, test management, and tools that support software testing are included. Lab fee.

**COURSE GOALS**

The student will:

Bloom's Level		Program Outcomes
2	1. Describe why testing is necessary and explain the seven testing principles, the test process, and the psychology behind testing.	6
2	2. Explain the relationships between software development activities and test activities in the software development lifecycle.	6
2	3. Compare the different test levels and test types.	6
2	4. Explain the difference between static and dynamic testing techniques and summarize the static review process.	6
3	5. Apply black-box testing techniques.	7, 8
2	6. Explain white-box and experienced-based testing techniques.	6
1	7. Identify the tasks of a test manager and tester.	1
2	8. Describe the process of managing tests, from planning and estimation to monitoring and control through documenting the defects found during testing.	6
1	9. Identify considerations in test tool selection.	5, 6

**CORE VALUES**

The Core Values are a set of principles that guide Edison State Community College in creating its educational programs and environment. They will be reflected in every aspect of the College. Students' educational experiences will incorporate the Core Values at all levels, so that a student who completes a degree program at Edison State Community College will not only have been introduced to each value, but will have had them reinforced and refined at every opportunity.

**TOPIC OUTLINE**

1. Fundamentals of Testing
2. Evaluation of the Software Development Lifecycle
3. Static Testing
4. Test Techniques
5. Test Management
6. Tool Support for Testing