

Test Management and Organization Course Outline

General Description

Why do organizations bother to test systems before delivering or deploying them? To reduce the likelihood of costly, embarrassing, or even dangerous bugs, or, to put it more briefly, to manage risks. Starting at this point, we'll discuss how testing fits into the larger project and organizational context. Next, we'll look at ways to achieve this alignment. How can we decide what's in scope for testing – and what's not? What's a realistic schedule and budget for such an effort? Finally, we'll discuss some of the challenges and key activities associated with managing a test subproject.

Learning Objectives

Through presentation and discussion, attendees will learn:

- How test efforts fit into various system lifecycles, how the lifecycles affect the testing effort, and what characterizes successful testing efforts.
- The organizational context of an independent testing team, including some of the stakeholders who receive testing services or provide prerequisites to the testing effort.
- The cost-of-quality based business case for testing (i.e., return-on-investment analysis).
- The relationships between: quality; the customers' and users' experience of quality; the actual usage of the system; and, testing.
- The testing process at a high level.

Course Materials

This course includes the following materials:

<i>Name</i>	<i>Description</i>
Course Outline	A general description of the course along with learning objectives, course materials and an outline of the course topics, including approximate timings for each section.
Noteset	A set of approximately 100 PowerPoint slides covering the topics to be addressed.
Bibliography and resources	A set of further readings, Web sites, tools and other resources to help implement the concepts.

The printed course materials are provided in a binder in a way which makes it convenient for course attendees to remove portions as needed for reference; e.g., during exercises.

Session Plan

Introduction to test management

The testing process in the software project context

- Development and other lifecycles
- Process maturity
- Successful test projects

Testing and software business considerations

- Cost of quality
- The actuarial model
- Testing and quality
- Defining testing scope
- Estimating the effort

Testing within the organization

- Testing in the organizational structure
- Organizing test functions
- The test team's relationship to other teams

Test management techniques

- Planning
- Test design and development
- Test phases
- Test team size and skills
- Testing challenges

Questions and discussion

Bibliography and resources