



Information Technology

Strategic Test Design and Management for Complex Systems

Course Introduction

This course focuses on advanced strategies for designing and managing testing processes for complex systems. It equips senior managers and executives with the knowledge and skills to develop comprehensive test strategies, optimize test processes, and align testing with organizational goals.

Target Audience

1. Test Manager
2. QA Engineer
3. Software Test Architect
4. Systems Engineer
5. DevOps Engineer
6. Software Development Manager
7. IT Project Manager
8. Automation Test Engineer
9. Product Manager
10. Business Analyst

Learning Objectives

- Understand the strategic importance of testing in systems design and development
- Develop skills to create and implement effective test strategies for complex systems
- Learn to align testing processes with overall project and organizational objectives
- Gain insights into managing and optimizing testing resources and processes
- Master best practices in test management and quality assurance leadership

Course Outline

- **Day 01**

- Foundations of Strategic Test Management**

- Role of testing in systems design and organizational strategy
 - Key components of effective test strategies for complex systems
 - Test management frameworks and methodologies
 - Case study: Successful test management in large-scale projects

- **Day 02**

- Advanced Test Strategy Development**

- Risk-based testing approaches for complex systems
 - Test coverage optimization techniques
 - Integrating various testing types in a cohesive strategy
 - Workshop: Developing a comprehensive test strategy

- **Day 03**

- Test Process Optimization**

- Lean and Agile testing methodologies for complex systems
 - Continuous testing and integration strategies
 - Automating test processes in large-scale projects
 - Group exercise: Optimizing a test process for efficiency

- **Day 04**

- Resource Management and Team Leadership in Testing**

- Building and managing high-performance test teams
 - Resource allocation and capacity planning in testing
 - Stakeholder management in test projects
 - Role-playing: Addressing test management challenges

- **Day 05**

- Quality Metrics and Continuous Improvement**

- Developing KPIs for testing effectiveness and efficiency
 - Analytics and reporting in test management
 - Continuous improvement in test processes
 - Action planning: Creating a test excellence roadmap

Confirmed Sessions

FROM	TO	DURATION	FEE\$	LOCATION
May 4, 2025	May 8, 2025	5 days	4250.00 \$	KSA - Riyadh
July 7, 2025	July 11, 2025	5 days	4250.00 \$	UAE - Dubai
Sept. 7, 2025	Sept. 11, 2025	5 days	2150.00 \$	Virtual - Online
Nov. 17, 2025	Nov. 21, 2025	5 days	5950.00 \$	USA - Los Angeles