



# Software Test Management and Test Processes Improvement

This course presents the management of the testing process in the context of software engineering. It covers the application of quality risks and how to apply a risk-driven test development. The participants would be able to understand the value of testing in making a "go/no-go" decisions in software deployment.

This course covers a modern approach in test process improvement. This includes the roles and responsibilities associated for test process improvement project. Gap analysis and next steps to undergo to proceed to the next level of process maturity is presented.

## Training Objectives

At the end of the course, the participants will be able to:

1. Apply quality risk analysis, determine test project scope, and prepare a budget and schedule.
2. Institute and use bug and test tracking systems that support effective test reporting.
3. Prepare for and manage the challenges of test execution.
4. Build and retain an effective test team.
5. Work and communicate effectively with managers and peers, especially when communicating test findings.
6. Improve testing processes.
7. Make visible step-by-step improvements for a fast payback.
8. Describe various Test Process Improvement models.
9. Implement improvements in conjunction with or independent of the Capability Maturity Model Integration (CMMI).

## Topics

- I. Pragmatic Testing Unravelling
  - a) Effective and Efficient Testing
  - b) Right Level of Efficiency
- II. Aligning Testing in the Project
- III. Test Strategies, Tactics, and Design test strategies
  - a) Analytical
  - b) Model-based
  - c) Methodical
  - d) Process-oriented
  - e) Dynamic
  - f) Philosophical
  - g) Regression
  - h) Three Other Regression Strategies
  - i) Test Tactics
  - j) Categories of Testing Techniques
  - k) Strategic and Tactical Considerations
- IV. Managing Test Execution and Reporting Test Progress
- V. Applying Process Improvement to the Testing Process
- VI. Using the Test Maturity Model (TMM)
- VII. How to Conduct TMM Assessments
- VIII. Structured Test Process Improvement

**Duration** 2 days