

# Reviews and Testing



## During this two day workshop you will learn how to:

- Implement reviewing techniques.
- Define the contents of quality plans and test documentation.
- Perform different test phases and measure their effectiveness.
- Employ the techniques in use for unit testing.
- Incorporate code checks to ensure testability and defensive coding.

## Objectives

- To introduce effective reviewing techniques.
- To define the contents of a quality plan which addresses all aspects of defect removal.
- To enable you to understand the purpose of different types of tests.
- To introduce and define meaningful defect removal metrics.
- To provide an introduction to testing techniques.

## Benefits

- Improved reviewing techniques.
- Better definition of quality plans and test documentation.
- Increased effectiveness of different test phases.

## Workshop format

Presentations are interspersed with in-class exercises during which you will have the opportunity to try some of the techniques and concepts discussed.

The course material comprises all overheads and course notes.

## Who should attend

- Project managers.
- Staff responsible for planning or running tests.

## Course content

### Quality Plans

- Their use and recommended contents.

### Review Techniques

- Benefits of reviews.
- Peer reviews, walkthroughs and inspections.

### Designing for Testability

- User requirements.
- Making non-functional requirements testable.
- Structured design.
- Good and bad design from a testing point of view.

### Testing

- The essentials of software testing.
- Objectives of testing.
- Unit testing, integration testing, system testing and regression testing.

### Testing Techniques

- Black box testing vs White box testing.
- Boundary value analysis.
- Compatibility testing.
- Condition coverage.
- Equivalence partitioning and limit testing path coverage.
- Performance testing, random testing, recovery testing, reliability testing, stress testing, volume testing.

### Testing Plans

- Various plans required at different stages.
- Development test plans.
- Writing tests.

### Testing Tools

- Various tools available for testing, pros and cons.
- Tool selection.