

Course Name:	Effective Software Testing for Enterprise Systems
Duration:	2 Day
Medium of Instruction:	Cantonese (with terminology & handout in English)
Award of Certificate:	Certificate of Attendance

Nature and Objectives:

The course will introduce useful testing methodologies to help participants in planning and executing the right steps when testing an enterprise system used by many types of users. It outlines how to conduct test planning, design test plans for different types of testing, deploy suitable testing tools, track problems encountered during testing and rectify these problems to ensure the system usability. IT professionals working on mission critical enterprise systems that have great impact to the business and the organization can gain benefits from the course by having better understanding about the impacts of insufficient testing and using a more effective approach in managing testing activities to prevent and minimize system handicap after launching the system for end users to operate.

Who Should Attend:

Professional involves in software development and software testing: Software developers, IT managers, Project managers, System analysts, programming and testing personnel, Key user representatives in IT projects (such as O&M personnel), IT auditors.

Course Outline:

Testing Overview & Software Defects

- Why software testing?
- Software testing (Types / Approach / Techniques)
- Limitations of testing
- Testing versus software engineering
- Reasons causing software defects
- Types of software defects

Testing Methodology

- What is STEP & its architecture (Phases / Activities / Tasks)
- Levels and timing
- Components of testware
- Evaluating the testware
- Roles and responsibilities of testing & review

Test Planning and Design

- Developing the test strategy
- Verification and validation

Test Planning and Design (Con't)

- Estimating resources, schedule & effectiveness Achieving buy-in
 - Master planning
- Level-specific planning
- Testing environment planning
- Test cases design
 - Types of test cases
 - Design methods & Techniques
- Designing self-tests
- Test for internationalization & localization

Test Execution & Problem Tracking

- Test team organization
- Readiness for test execution
 - Test environment
 - Test data
 - System to be tested

- Procedures for running tests

Test Execution and Problem Tracking (Con't)

- Testing aids
 - Software testing tools
 - Test library manager
 - Data generators
- Deciding when to stop
 - Stopping criteria
 - Checking adequacy
 - Coverage analysis
- Test results tracking & reporting
 - Test logs
 - Test status reporting
 - Test incident report
 - Test summary report
- Problem tracking system
 - Considerations in using a tracking system
 - Categorizing defects
 - Monitoring defect status

Testing Existing Software & Purchased Packages

- Modifications & enhancements of existing software
 - Regression testing
 - Retesting strategies, alternatives and guidelines
- Purchased software packages
 - Key questions
 - Testing guidelines
 - Vendor support

Testing Perspectives

- What is easy & what is hard?
- Making changes and improvement in testing
- Is it worth spending on testing?