



## Introduction to Software Testing Program

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### Course Description

SQA Centre's Introduction to Software Testing Program is designed to provide a highly practical bottom-up introduction to software testing and quality assurance. Every organization delegates testing and high-level quality assurance activities in a different way. This course provides a broad view of both quality assurance and testing so that participants will have a broad awareness of many of the activities that contribute to managing the quality of a software product. Also, automation concepts will be discussed and training will include hands on Mercury Interactive's Quick Test Pro as a test automation tool.

### Course Topic Outline

#### I. Fundamentals of Software Testing

- Introduction to Software Testing
- What is SDLC?
- SDLC Objectives
- Phases in SDLC
  - Investigation Phase
  - Project Planning
  - Requirement
  - Analysis and Design
  - Development
  - Testing
    - Introduction
      - Planning
        - Preparing test plan.
        - Test Cases
      - Execution

- Functional testing
- User Acceptance testing
- Performance testing
- Load testing
- Stress testing
- Integration testing
- Manual testing
- Black box testing
- White box testing
- Unit testing
- Component testing
- Usability testing
- Automated testing
- Tools
- Defect tracking
  - What is defect tracking?
  - Need for defect tracking
  - How testing fits into other teams
  - Quality Assurance
- Software Configuration Management (SCM)
  - The CM process, activities
    - The role and responsibilities of a CCB
- Training & Installation
- Maintenance Phase
- Alternative Techniques
  - Waterfall model
  - Iterative model
  - Rapid Application Development (RAD)
  - Rational Unified Process (RUP)
  - Structured and Object Oriented model
  - Spiral model
  - Joint Application Development (JAD)
  - Prototyping model
  - Synchronize and stabilize
  - Extreme Programming (XP)
  - Win-Win model

- Risk Management
  - Risk Identification
  - Risk Quantification
  - Risk Response Development
- Additional Project Considerations
  - Good testing practices
  - Mentoring
  - Career in testing
- Manual Testing
  - Practical Exercise
- Overview of Automation Testing Tools
  - Quick Test Professional
  - Practical Exercise

**Program Session:** 3 days session.

**Tuition Fee: \$1250 per person (including GST)**

**(For a group of 4-6 members, we will provide 5% discount).**

**Job Placement & Assistance:**

SQA Centre provides a variety of services to assist students in achieving their career goals. We encourage students to sign up with SQA Centre's Career Services at our human resource department.

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