## <u>Certified Software Tester - Foundation Level (CSTFL)</u>

- 1. The Fundamentals of Testing
  - Why is testing necessary?
  - Harm caused by defects in software
  - Root causes
  - Testing and quality assurance
  - What is testing?
  - General testing principles
  - Fundamental test process
  - The psychology of testing
- 2. Testing throughout the software life cycle
  - Software development models
  - Test levels
  - Objectives objects and targets of testing
  - Functional and non-functional testing
  - Structural and change-related testing
  - Confirmation, regression and maintenance testing
- 3. Static techniques
  - Reviews and the test process Test levels
  - Typical formal review process
  - Different types of review: informal review, technical review, walkthrough and inspection
  - Static analysis tools
- 4. Test design techniques
  - Identifying test conditions and designing test cases
  - Equivalence partitioning
  - Boundary value analysis
  - Decision tables
  - State transition diagrams
  - Use case testing
  - Statement and decision coverage
  - Control flows using statement testing and decision testing
  - Experience based techniques
  - Choosing techniques

- 5. Business Analyst Skills Introduction to Business
  - Introduction to Business Process Analysis
  - Why Business Analysis
  - Roles and responsibilities of a Business Analyst
  - Key concept of business analysis
  - What is domain knowledge?
  - How to adapt with different domains
- 6. Test management
  - Test organization, planning and estimation
  - 'Standard for Software Test Documentation' (IEEE 829)
  - Exit criteria
  - Test progress monitoring and control
  - Metrics and reporting
  - Configuration management
  - Risk and testing
  - Incident management
  - Incident reporting
- 7. Tool support for testing:
  - Types of test tool
  - Effective use of tools
  - Potential benefits and risks
  - Introducing tools