

## Software Testing Syllabus

### Course Outline

- **Module 1:-**
  - Importance of Software Testing and Why Software Testing is so important.
  - Career and Future in Software Testing
  - Types of Organizations and Team Structure
  - Project Bidding and Initiation
  - Kick of Meetings
  - What is Requirement Document( SRS/Approved SRS)
  - Requirement Gathering and Query log
  - Compatibility Testing
  - System Testing
  - System Integration Testing
  - Retesting
  - Sanity Testing
  - Difference between Sanity and Smoke Testing
  - Test Case Writing and Execution
  - Test Case Design Guidelines
  - Equivalence Partitioning and Boundary Value Analysis
  - Test Scenario Design
  - Test Coverage and Analysis
- **Module 2:-**
  - Defects/Bug and Error
  - Why Software have Bugs
  - Types of Software Testing
  - Black Box Testing,
  - White Box Testing
  - Grey Box Testing
  - Functional Testing
  - Unit Testing
  - Build Verification Testing(BVT)
  - Tracker Tools (Task Tracking Tools)
  - Environments (Dev, QA, Staging, Prod and Mirror Prod)
  - Unit Testing and Smoke Testing
- **Module 3:-**
  - Priority and Severity
- **Module 4:-**
  - Negative testing and Exhaustive Testing
  - Ad Hoc Testing
  - Live Project 2 Discussion
  - Regression Testing
  - User Acceptance Testing (UAT)
  - Root Cause Analysis
  - Alpha Testing
  - Beta Testing
  - Load Testing, Volume Testing and Stress Testing
  - Guest Lecture ( Case Study of their project)
  - Review ( Peer Review/ Walkthrough/ inspection)
  - Defect Life Cycle and Bug Follow Up
  - Defect Tracking Tools ( Bugzila, Jira and HPQC)

- Jira task Creation, Bug creation and Report Generation
- **Module 5:-**
  - Software Development Life Cycle (SDLC)
  - Software Test Life Cycle(STLC)
  - Verification and Validation
  - Introduction of Agile Methodology
  - Agile Terminology and workflow
  - Test Plan and Test Management
  - Test Closure Activity
  - Project Risk and Mitigation
  - Client Sign off Documents
  - Do's and Don't in Software Testing
  - What is Quality and Attributes of Quality
  - Quality Assurance and Quality Control
  - Quality Management Software (QMS)
- **Module 6:-**
  - Capability Maturity Model Integration (CMMI)
  - Demonstration of Automation Testing
  - Monolithic and Micro services
  - How start Automation Testing and Pre- Requisite
  - Live Project Assignments to Students
  - ISTQB Certification, Pattern and Question Papers
- Resume Writing and Interview Questions
- Job Recommendation Interviews and Feedback
- **Module 7:-**
  - Project on Banking Domain
  - Profession Resume Preparation
  - Written Test Preparations
  - Interview Questions
  - Virtual Interview Sessions
  - Profile Creation on Job Portal
  - Interview Schedule and Recommendations
  - Feedback Collection

