

Institute of Information Technology
University of Dhaka

Course Title Software Testing & Quality Assurance

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Course Outline

- The Psychology and Economics of Software Testing,
- Software Testing Life Cycle (STLC), Software Testing Terminology and Methodology,
- V&V Model,
- Dynamic Black Box Testing: Boundary Value Analysis, Equivalence Partitioning, State Transition based Testing, Decision Table based Testing, Cause-Effect Graphing based Testing and Error Guessing,
- Dynamic White Box Testing: Basis Path Testing, Data Flow Testing and Mutation Testing, Inspections, Walkthroughs, Technical Reviews, Unit Testing, Integration Testing, Function Testing, System Testing, Acceptance Testing, Regression Testing,
- Test Management: Test Organization, Test Plan, Test Design and Specifications
- Test case prioritization: minimization and reduction
- Software measurement and Software Metrics,
- Test smells and the quality of test cases
- Software Quality, Quality Control and Quality Assurance, Quality Management and Project Management, Software Quality Metrics,
- Testing Object Oriented software
- Testing Internet Applications: Security, Load and Performance Testing,
- Testing AI/ ML systems
- Test automation