ISTQB Certified Tester AI Testing (CT-AI) Course

Course Duration: 24 Hrs. **Course Code: CT-AI**

Course Overview

The **ISTQB Certified Tester AI Testing (CT-AI)** course is designed for testing professionals who want to develop specialized skills for testing systems that use Artificial Intelligence (AI) and Machine Learning (ML). This course focuses on the unique challenges of testing AI-based systems, including data-driven behavior, non-deterministic outcomes, and ethical considerations. Participants will learn how to apply appropriate testing strategies and techniques to ensure quality, reliability, transparency, and trustworthiness of AI solutions while preparing for the ISTQB CT-AI certification exam.

What You'll Learn?

By completing this course, you will be able to:

- Understand AI and ML concepts from a testing perspective
- Identify risks and quality characteristics specific to AI systems
- Design and execute tests for data, models, and AI behavior
- Apply testing techniques for ML models and AI pipelines
- Evaluate robustness, bias, explainability, and ethics in AI systems
- Integrate AI testing into agile and DevOps workflows
- Prepare effectively for the ISTQB CT-AI certification exam

Target Audience

This course is ideal for:

- Software Testers and QA Engineers
- Test Analysts and Technical Testers

Phone: +91-999-911-1686 **Mail Us:** info@ssdntech.com

- AI/ML Test Engineers
- Developers involved in AI system testing
- Quality professionals working on AI-driven products

Pre-Requisites

Participants should have:

- ISTQB Certified Tester Foundation Level (CTFL) certification
- Basic understanding of software testing principles
- Fundamental knowledge of AI or machine learning concepts is beneficial
- Familiarity with agile development practices

Course Content

Module 1: Introduction to AI and AI Testing

- Fundamentals of AI and machine learning
- Characteristics of AI-based systems
- Role of testing in AI quality assurance

Module 2: Quality Characteristics and Risks of AI Systems

- Functional and non-functional quality aspects
- Data quality, bias, and fairness
- Risk identification and mitigation

Module 3: Testing Data and Models

- Training, validation, and test data sets
- Data preparation and quality checks

- Model evaluation and validation techniques

Module 4: Testing AI System Behavior

- Functional and exploratory testing of AI systems
- Robustness, performance, and security testing
- Handling non-deterministic outcomes

Module 5: AI Testing in Development and Operations

- Testing AI pipelines and workflows
- Continuous testing for AI systems
- Monitoring AI behavior in production

Module 6: Ethics, Governance, and Continuous Improvement

- Ethical considerations in AI testing
- Explainability, transparency, and compliance
- Improving and evolving AI testing practices