

# ISTQB Certified Tester Advanced Level Technical Test Analyst (CTAL-TTA) Course

**Course Duration: 24 Hrs.**

**Course Code: CTAL-TTA**

## Course Overview

The **ISTQB Certified Tester Advanced Level – Technical Test Analyst (CTAL-TTA)** course is designed for experienced testing professionals who want to deepen their technical testing expertise. This course focuses on applying advanced technical testing techniques to evaluate system quality attributes such as performance, security, reliability, and maintainability. It equips participants with the skills required to analyze technical risks, design effective technical tests, and support development teams in delivering robust and high-quality software solutions while preparing for the ISTQB CTAL-TTA certification exam.

## What You'll Learn?

By completing this course, you will be able to:

- Analyze technical risks and quality characteristics
- Design and execute advanced technical test cases
- Apply white-box and structure-based testing techniques
- Perform non-functional testing such as performance and security
- Evaluate system architecture and interfaces from a testing perspective
- Use tools to support technical testing activities
- Prepare confidently for the ISTQB CTAL-TTA certification exam

## Target Audience

This course is ideal for:

- Technical Test Analysts and Senior QA Engineers
- Test Automation Engineers and SDETs
- Performance and Security Testers
- Software Developers involved in technical testing
- Testing professionals seeking advanced-level ISTQB certification

## Pre-Requisites

Participants should have:

- ISTQB Certified Tester Foundation Level (CTFL) certification
- Solid experience in software testing
- Basic understanding of programming, databases, and system architecture
- Familiarity with agile or iterative development models

## Course Content

### Module 1: Technical Testing Foundations

- Role of the technical test analyst
- Quality characteristics and technical risks
- Technical testing in different life cycles

### Module 2: Structure-Based and White-Box Testing

- Code coverage techniques
- Control flow and data flow testing

- Static and dynamic analysis

### **Module 3: Non-Functional Testing Techniques**

- Performance, load, and stress testing
- Security testing fundamentals
- Reliability and maintainability testing

### **Module 4: Architecture, Interfaces, and Integration Testing**

- Testing system architecture and components
- Interface and API testing
- Integration strategies and challenges

### **Module 5: Technical Test Design and Execution**

- Designing technical test cases
- Test data and environment considerations
- Defect analysis and troubleshooting

### **Module 6: Tools, Automation, and Best Practices**

- Tools supporting technical testing
- Automation for technical and non-functional tests
- Best practices and continuous improvement