

# ISTQB Certified Tester Automotive Tester (CT-AuT) Course

**Course Duration: 40 Hrs.**

**Course Code: CT-AuT**

## Course Overview

The ISTQB Certified Tester Automotive Tester (CT-AuT) course is designed for testing professionals working in the automotive domain who need specialized knowledge of automotive software testing. This course focuses on testing challenges related to embedded systems, automotive standards, safety-critical systems, and modern vehicle architectures. It equips participants with domain-specific testing skills required to ensure quality, safety, and reliability in automotive software development while preparing them for the ISTQB CT-AuT certification exam.

## What You'll Learn?

By completing this course, you will be able to:

- Automotive Software Testers
- Embedded Systems Test Engineers
- QA Engineers working in automotive projects
- Test Analysts and Technical Testers
- Professionals involved in ECU, ADAS, or infotainment testing

## Target Audience

This course is ideal for:

- Test Analysts and Senior QA Engineers
- Business Analysts involved in testing activities

- Quality Engineers and Test Consultants
- QA Leads responsible for test design and analysis
- Testing professionals seeking advanced-level competencies

## Pre-Requisites

Participants should have:

- ISTQB Certified Tester Foundation Level (CTFL) certification
- Basic understanding of software testing principles
- Familiarity with embedded systems or automotive software (preferred)
- Knowledge of software development life cycles

## Course Content

### Module 1: Automotive Software Testing Fundamentals

- Overview of automotive systems and architectures
- Automotive software development lifecycle
- Role of testing in automotive projects

### Module 2: Automotive Standards and Regulations

- ISO 26262 functional safety overview
- Automotive SPICE (ASPICE) concepts
- Compliance and quality considerations

### Module 3: Test Levels and Test Types in Automotive Systems

- Unit, integration, system, and acceptance testing
- Testing ECUs and distributed systems

- Hardware-in-the-Loop (HIL), Software-in-the-Loop (SIL), and Model-in-the-Loop (MIL) testing

#### **Module 4: Risk-Based and Safety Testing**

- Safety-critical testing principles
- Hazard analysis and risk assessment
- Traceability and safety validation

#### **Module 5: Automotive Communication and Interface Testing**

- CAN, LIN, FlexRay, and Ethernet basics
- Interface and network testing
- Diagnostic testing concepts

#### **Module 6: Advanced Automotive Testing Challenges**

- ADAS and autonomous systems testing basics
- Infotainment and connectivity testing
- Future trends in automotive software testing