

# Tosca Training

Suresh IT's Training Center offers an intensive Tosca Training Course, designed in collaboration with industry experts to equip participants with comprehensive skills in automated software testing using Tosca. Participants learn to leverage Tosca's advanced features for efficient test automation, including model-based testing and risk-based testing. By the course's completion, graduates are well-prepared to harness the full potential of Tosca for accelerating software testing processes and ensuring high-quality software deliverables.

**Course Duration** : 45 Days

**Course Language** : English/Hindi/Telugu

**Classroom** : Offline/Online Training/Hybrid Training

## Description

The Tosca Training course is a comprehensive program designed to provide individuals with the knowledge and skills required to effectively utilise Tosca, a leading test automation tool for continuous testing and quality assurance. Geared towards software testers, quality assurance engineers, and test automation professionals, this course offers hands-on training in Tosca's capabilities, features, and best practices.

Throughout the course, participants will delve into various aspects of Tosca, including test case design, test execution, test data management, and defect tracking. They will learn how to create robust and scalable test automation frameworks using Tosca's intuitive graphical user interface (GUI) and advanced scripting capabilities. Additionally, participants will explore Tosca's powerful model-based testing approach, enabling them to efficiently design and execute tests based on application models.

Moreover, the Tosca Training course covers essential topics such as integration with test management tools, version control systems, and continuous integration (CI) pipelines, facilitating seamless collaboration and automation within the software development lifecycle. Participants will also learn how to leverage Tosca's built-in analytics and reporting capabilities to gain insights into test coverage, quality trends, and release readiness.

By the end of the course, participants will be equipped with the skills and confidence to leverage Tosca effectively for automating end-to-end testing processes, reducing manual effort, and accelerating time-to-market for software applications. With their newfound expertise in Tosca, participants will be well-positioned to drive innovation, quality, and efficiency in their organisations' testing practices.

## Skills you get

- Model-based Test Automation with Tosca
- Proficiency in Tosca Commander
- API and Web Services Testing
- Test Case Design and Management
- Data-driven Testing Techniques
- Integration with CI/CD Pipelines

# Course Contents

## Introduction to Tosca

- Overview of automated testing
- Introduction to Tricentis Tosca
- Tosca features and capabilities
- Installing Tosca (Windows)
- Tosca workspace and projects

## Exercises:

- Install Tosca and set up the workspace
- Create a new project and explore the Tosca interface

## Tosca Basics

- Understanding Tosca commander
- Modules and TestCases
- Basic TestCase creation
- TestStep blocks
- Standard modules

## Exercises:

- Create and execute basic TestCases
- Use standard modules to create TestSteps
- Explore TestStep blocks and their usage

## Model-based Test Automation

- Introduction to Model-Based Test Automation (MBTA)
- Scanning applications to create modules
- Working with Tosca XScan
- Creating reusable TestCases
- Linking TestCases to requirements

## **Exercises:**

- Scan an application to create modules
- Develop reusable TestCases using the scanned modules
- Link TestCases to requirements and execute them

## **Test Data Management**

- Introduction to Test Data Management (TDM)
- Creating and using Test Data Containers
- Data-driven testing
- Managing Test Data with Tosca TDM

## **Exercises:**

- Create test data containers
- Develop data-driven TestCases
- Manage and reuse test data within TestCases

## **Advanced TestCase Design**

- Dynamic TestCases with conditions and loops
- Using Tosca templates
- Handling dynamic values and parameters
- Synchronisation and waits

## **Exercises:**

- Create dynamic TestCases using conditions and loops
- Develop TestCases with templates for reusable components
- Handle dynamic values with parameters and synchronizations

## **API Testing with Tosca**

- Introduction to API Testing
- Scanning and Creating API Modules
- Creating API TestCases
- Validating API Responses

## **Exercises:**

- Scan and create modules for API testing
- Develop and execute API TestCases
- Validate responses and handle different data formats

## **Test Execution and Reporting**

- Test execution overview
- Configuring execution lists
- Running TestCases in different environments
- Analysing execution results
- Generating and customising reports

## **Exercises:**

- Configure and execute TestCases using execution lists
- Run tests in multiple environments and analyse results
- Generate detailed execution reports

## **Tosca Automation and Scripting**

- Introduction to Tosca Automation
- Customising TestCases with TQL (Tosca Query Language)
- Scripting with VBScript and C# in Tosca
- Extending Tosca with custom libraries

## **Exercises:**

- Write and execute custom scripts using TQL
- Use VBScript and C# for advanced TestCase customization
- Extend Tosca functionality with custom libraries

## **Integrations and CI/CD**

- Integrating Tosca with CI/CD tools (Jenkins, Azure DevOps)

- Continuous testing with Tosca
- Version Control Integration
- Integrating Tosca with ALM tools

### **Exercises:**

- Set up Tosca integration with Jenkins or Azure DevOps
- Configure continuous testing pipelines
- Use version control systems with Tosca

### **Best Practices and Advanced Topics**

- Tosca best practices
- Optimising TestCases for performance
- Troubleshooting common issues
- Real-world case studies

### **Exercises:**

- Optimise an existing set of TestCases
- Debug and troubleshoot common issues in TestCases
- Analyse and learn from case studies

This course structure ensures that learners get a thorough understanding of Tosca, from the basics to advanced concepts, along with practical, hands-on experience.