C# for Testers

Audience Course C# for Testers
The course C# for Testers is intended for experienced testers who want to learn how to use C#, NUnit and SpecFlow when writing test scripts.
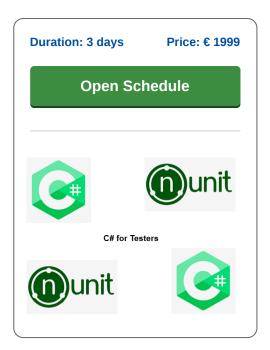
Prerequisites Course C# for Testers
Knowledge of and experience with testing is required to participate in this course. Experience with programming is beneficial for understanding but not required.

Realization Training C# for Testers
The course C# for Testers has a hands-on character. The theory is treated on the basis of presentation slides and is interchanged with practical exercises. The course material is in English. Course times are from 9.30 up and to 16.30.

Certification Course C# for Testers
After successful completion of the training the participants receive an official certificate C# for Testers.

Duration: 3 days   **Price: € 1999**

Open Schedule

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Content Course C# for Testers

The course C# for Testers discusses the basic syntax of the C# programming language and how to use C# when writing NUnit tests and implementing SpecFlow scenarios. C# is the most often used language in the .NET Framework and is very similar to Java. NUnit and SpecFlow are frequently used libraries in test automation.

C# Intro
The course starts with a discussion of the .NET environment in which C# code runs. The .NET Framework class library and NuGet for managing dependencies in .NET are discussed here.

C# Syntax
Next attention is paid to the various data types in C# such as value types and reference types. Also covered are flow control constructs, calling methods and passing parameters.

Classes and Object
Object oriented programming in C# with classes and objects, constructors, private and public data is also treated. The concepts inheritance, polymorphism and interfaces are explained. And the data structure classes of the collection framework are discussed as well.

Exception Handling
Handling errors by means of the exception handling mechanism is part of the course program. Common exceptions such as the null reference exception and their causes are covered.

NUnit Test
Also on the program of the course is the setting up NUnit tests, the structure of NUnit tests, the annotations and assert statements used, the execution of NUnit tests in a Visual Studio environment and reporting on the results of the tests.

SpecFlow
Finally the course C# for Testers covers the SpecFlow Framework with the Gherkin mini language. Attention is paid to Feature files, Step definitions and the integration with NUnit. The course C# for Testers is a good basis to participate in the course **Web Testing with Selenium**.

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Modules Course C# for Testers

Module 1 : Intro C#	Module 2 : Language Syntax	Module 3 : Classes and Objects
.NET Overview	C# Data Types	Class Definition
Common Language Runtime	Variables and Scope	Encapsulation
C# Language	Value Types	Access Modifiers
Managed Code	Reference Types	Constructors
C# Compilation	Operators	Creating Objects
Visual Studio IDE	Flow Control	Fields and Properties
Assemblies	if and else Statements	Special Properties
Namespaces	switch Statement	static Modifier
Common Type System	for and while Loops	Overloading
.NET Core	break and continue	Constants
.NET Class Library	Strings and Arrays	Inheritance
Dependency Management	Methods	Polymorphism
NuGet	Parameter Passing	Interfaces
Module 4 : Exception Handling	**Module 5 : Collections**	**Module 6 : NUnit and SpecFlow**
Error Conditions	Properties of Collections	NUnit Integration
Exceptions in C#	Parameterized Types	Assert Statements
Exception Handling Syntax	Compile Time Safety	Fixtures
Exception Flow	Using Generics	Annotations
Exceptions Template	Predefined Collections	Parameterized Tests
Exceptions Object	Array and List Class	Acceptance Testing
finally Clause	Queue and Stack Class	SpecFlow Scenario's
Common Exceptions	Linked List	Feature Files
Throwing Exceptions	Sorted List	Gherkin Keywords
User Defined Exceptions	Dictionary	Given When
Catching User Exceptions	Hashtable	Test Automation