NET100 : C# Programming

Code : NET100 **Duration :** 5 days **Category :** dotnet

Audience :

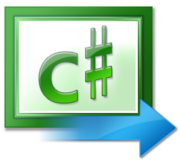
The course is intended for experienced developers with a background in Java, C++, Delphi or Visual Basic.

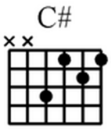
Prerequisites :

Participants in this course should have experience in Java, C++, Delphi or Visual Basic, also are expected to be familiar with the basics of. NET Framework.

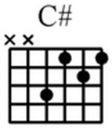
Realization :

The course alternates theory, based on presentation sheets with demos and exercises.





C# Programming



Contents :

In this course you will learn to program in the. NET platform and the C # language. The emphasis of the course is on the C# syntax, C# program structure, and implementation details. After attending the course, participants will be able the role of C# compared. NET Framework and. NET Platform to describe. They are able to write a simple application, document, debug and compile. End, they make use of variables, looping, exception handling, methods, arrays and objects. Furthermore, they are able to work with classes, operators, delegates, events, properties, indexers, and attributes.

Module 1 : Overview of .NET Platform

Introduction to the .NET Platform
Overview of the .NET Framework
Benefits of the .NET Framework
The .NET Framework Components
Languages in the .NET Framework

Module 2 : Overview of C#

Structure of a C# Program
Basic Input/Output Operations
Recommended Practices
Compiling, Running, and Debugging

Module 3 : Using Value-Type Variables

Common Type System
Naming Variables
Using Built-In Data Types
Creating User-Defined Data Types
Converting Data Types

Module 4 : Statements and Exceptions

Introduction to Statements
Using Selection Statements
Using Iteration Statements
Using Jump Statements
Handling Basic Exceptions
Raising Exceptions

Module 5 : Methods and Parameters

Using Methods
Using Parameters
Using Overloaded Methods

Module 6 : Arrays

Overview of Arrays
Creating Arrays
Using Arrays

Module 7 : Essentials of OO Programming

Classes and Objects
Using Encapsulation
C# and Object Orientation
Defining Object-Oriented Systems

Module 8 : Using Reference-Type Variables

Using Reference-Type Variables
Using Common Reference Types
The Object Hierarchy
Namespaces in the .NET Framework
Data Conversions

Module 9 : Creating and Destroying Objects

Using Constructors
Initializing Data
Objects and Memory
Resource Managements

Module 10 : Inheritance in C#

Deriving Classes
Implementing Methods
Using Sealed Classes
Using Interfaces
Using Abstract Classes

Module 11 : Aggregation and Namespaces

Using Internal Classes
Using Methods, and Data
Using Aggregation
Using Namespaces
Using Modules and Assemblies

Module 12 : Operators and Events

Introduction to Operators
Operator Overloading
Creating and Using Delegates
Defining and Using Events

Module 13 : Properties and Indexers

Using Properties
Using Indexers

Module 14 : Attributes

Overview of Attributes
Defining Custom Attributes
Retrieving Attribute Values

Module 15 : Additional Features

Overview
Generics
Anonymous Methods
Partial Classes
Nullable Types
Static Class