

C# Programming

Duration - 12 Days / 96 Hours

Program Description

This program introduces learners to the foundational concepts of C# programming, specifically tailored for beginners. It covers essential areas such as syntax, object-oriented programming principles, data structures, exception handling, and file I/O. The course also dives into the .NET Collections Framework, basic database connectivity using ADO.NET, and key C# 8.0 features like asynchronous programming and LINQ, equipping learners with the knowledge to develop robust and efficient C# applications.

Learning Goals

- ❖ Understand the fundamentals of C# programming, including syntax, structure, and key language features.
- ❖ Learn Object-Oriented Programming (OOP) principles and their practical application in software development.
- ❖ Explore core data structures such as arrays, lists, and strings for effective data management.
- ❖ Handle errors efficiently with Exception Handling and perform File I/O operations.
- ❖ Gain a deeper understanding of the .NET Collections Framework and generics for advanced data manipulation.
- ❖ Connect C# applications with databases using ADO.NET for data-driven development.
- ❖ Learn and implement unit testing using MSTest or NUnit for robust, testable code.
- ❖ Explore asynchronous programming with async/await, as well as LINQ for functional programming.

Course Topics

- ❖ Introduction to C# and .NET Framework
- ❖ Object-Oriented Programming in C#
- ❖ Exception Handling in C#
- ❖ File I/O in C#
- ❖ Data Structures in C#
- ❖ .NET Collections Framework
- ❖ Asynchronous Programming in C#
- ❖ Unit Testing in C# with MSTest and NUnit

[Back](#)

Modules can be customized to suit client's specific needs and duration accordingly