Programming in C#

C# program structure, language syntax, and implementation details, and then consolidate their knowledge throughout the week as they build an application that incorporates several features of .NET.

Training Solutions:

√ Offline Classroom Instructor-Led Training in our labs or onsite Locations.

√ Virtual Instructor-Led Training Via Virtual Video Conferencing Tools.

- Premuim Training Services Accredited from Global Technology Vendors.
- Best Rated Experts & Certified Trainers in Egypt.
- Official Training Hours, Practice Labs, Hands-on Learning.
- CLS Training Classrooms are designed with High Edge PCs and Training Facilities.
- Return on Training Investment is Guaranteed to boost performance.



Programming in C# Course Outline :

Module 1: Review of Visual C# Syntax

Lesson 1: Writing Applications in C# and .NET

Lesson 2: Types of Data and Expressions Lesson 3: C# Language Constructs

Module 2: Creating Methods, Handling Exceptions, and Monitoring Applications

Lesson 1: Methods

Lesson 2: Method Overloading

Lesson 3: Exception Handling

Lesson 4: Monitoring

Module 3: Basic types and constructs of Visual C#

Lesson 1: Structs

Lesson 2: Enums

Lesson 3: Built-in Collections

Lesson 4: Events

Module 4: Creating Classes and Implementing Type-Safe Collections

Lesson 1: Creating Classes

Lesson 2: Interfaces

Lesson 3: Understanding Generics in C#

Module 5: Creating a Class Hierarchy by Using Inheritance

Lesson 1: Hierarchies of Classes

Lesson 2: Polymorphism

Lesson 3: Extending Classes

Module 6: Reading and Writing Local Data

Lesson 1: File I/O

Lesson 2: Serialization and Deserialization

Lesson 3: Streams

Module 7: Accessing a Database

Lesson 1: Entity Framework

Lesson 2: LINO

Module 8: Accessing Remote Data

Lesson 1: Web Services

Lesson 2: REST and Odata

Module 9: Designing the User Interface for a Graphical Application

Lesson 1: Using UI Frameworks

Lesson 2: Data binding

Lesson 3: Styling the UI

Module 10: Improving Application Performance and Responsiveness

Lesson 1: Multitasking

Lesson 2: Asynchronous Calls

Lesson 3: Dealing with Conflicts

Module 11: Integrating with Unmanaged Code

Lesson 1: Dynamic Objects Lesson 2: Managing Resources

Module 12: Creating Reusable Types and Assemblies

Lesson 1: Metadata

Lesson 2: Attributes

Lesson 3: Generating Code

Lesson 4: Assemblies

Module 13: Encrypting and Decrypting Data

Overview:

- · During their five days in the classroom students review the basics of Visual C# program structure, language syntax, and implementation details, and then consolidate their knowledge throughout the week as they build an application that incorporates several features of the .NET Framework 4.7.
- · This training course teaches developers the programming skills that are required for developers to create Windows applications using the Visual C# language.

Training:

- Explain how to use Visual Studio to create and run an application
- Describe the features and syntax of the C# programming language.
- Define the monitoring needs of large-scale applications
- · Create and call methods, capture and manage exceptions.
- Understand the .NET development platform and libraries.
- · Understand the .NET framework classes. • Create well-structured and easily-maintainable C# code.
- · Define and implement interfaces.
- · Create a class hierarchy using inheritance. Understand object-oriented programming concepts.

Audience Profile:

Who should enroll

• This course is intended for intermediate to advance level programmers / developers.

Prerequisites:

- Knowledge of basic AutoCAD tools such as draw and modify tools, layer management, object snaps, printing and configuring layouts, annotation tools, blocks, external references (Xrefs), and templates
- Knowledge of AutoCAD Sheet Set Manager to create, open, and publish sheets.
- Knowledge of Setting up a Civil 3D project.
- Knowledge of Applying the appropriate coordinate system to a Civil 3D drawing.
- · Knowledge of basic theory of civil design.

