

C# & .NET Training

Gain a working knowledge of C# & .NET in a day and start developing programs for a wide range of applications.

This comprehensive 1-day C# & .NET training course is designed for the experienced programmer to help you quickly come up to speed on the C# language and the core features of the .NET Framework.

Objective

This C# and .NET training course gives attendees:

- A rapid introduction to the C# language
- An understanding of the core features of the .NET framework
- An overview of object-oriented programming that can be applied to further development skills

Details

Duration: 1 Day

Course PreRequisites

We recommend having some coding experience and a good understanding of HTML before this course but as we run this course privately the content can be tailored to your requirements. Please call 01273 622272 to discuss your needs.

Course Content

.NET - what you need to know

- .NET Executables and the CLR
- A .NET Testbed for C# Programming

C# for the sophisticated programmer

- First C# Console Application
- Namespaces
- Data Types
- Control Structures
- Subroutines and Functions
- Console I/O
- Exception Handling

Object-oriented programming in c#

- Classes
- Access Control
- Methods and Properties
- Static Data and Methods
- Inheritance
- Overriding Methods
- Interfaces

C# and the .NET framework

- Class Hierarchies
- .NET Interfaces
- Using Generic Interfaces: icloneable and icomparable
- System.Array
- Collections
- Delegates
- Events

Interoperating with com and win32

- .NET Client Calling a COM Server
- COM Client Calling a .NET Server
- pinvoke

Database programming using ado.net

- ADO.NET Overview
- .NET Data Providers
- Using datareaders
- Using datasets
- Interacting with XML Data

Visual Studio .NET database testbed

- Server Explorer
- Query Analyzer
- OSQL

.NET fundamentals

- What is Microsoft .NET?
- Common Language Runtime
- Attribute Based Programming
- Interface Based Programming
- Metadata
- Common Type System
- Framework Class Library
- Language Interoperability
- Managed Code
- Assemblies and Deployment
- Web Services
- ASP.NET

Class libraries

- Components in .NET
- Building Class Libraries at the Command Line
- Class Libraries Using Visual Studio .NET
- Using References

Assemblies and deployment

- Assemblies
- Private Assembly Deployment

Metadata and reflection

- Metadata
- Reflection
- Late Binding

Introduction to windows forms

- Creating Windows Applications Using Visual Studio .NET
- Handling Events
- Shared Assembly Deployment
- Assembly Configuration
- Multi-Course Assemblies

I/O and serialisation

- Directories
- Files
- Serialisation
- Attributes

.NET programming model

- Threading and Synchronization
- Contexts
- Application Domains
- Marshal By Value
- Marshal By Reference
- Memory Management and Garbage Collection

Security

