55339: Programming in C#

Category: Software Development & Programming | **Vendor:** Microsoft

Duration: 40.00 hours (5 days) **32.5 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

This five- day training course teaches developers the programming skills that are required to create applications using the C# language. During their five days in the classroom, students review the basics of 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. The course aims to follow the spirit of the Microsoft Official Curriculum course 20483, while bringing it completely up-to-date with the latest features of C#, .NET 6.0 and Visual Studio 2022. 55339A is the equivalent of the retired MOC Course 20483CC - Programming in C#.

About This Course

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Who Should Attend

This course is intended for experienced developers who already have programming experience in C, C++, JavaScript, Objective-C, Microsoft Visual Basic, or Java, and understand the concepts of object-oriented programming. This course is not designed for students who are new to programming; it is targeted at professional developers with at least one month of experience programming in an object-oriented environment. Those new to programming should consider course 55337 - Introduction to Programming. The 55337 course uses C# as the language to facilitate an introduction to programming generally, whereas this course focuses on the C# language itself, making it an excellent follow-on course. If you want to learn to take full advantage of the C# language, then this is the course for you.

Prerequisites & Entry Requirements

General Prerequisites:

Some limited experience using C# to complete basic programming tasks.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

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. Implement the fundamental architecture and core components of a desktop application. Acquire a working knowledge of how to build a graphical UI using XAML. Use file I/O and streams, and serialize/deserialize data in various formats. Understand web communications and protocols. Create an entity data model for database access. Use Language-Integrated Query (LINQ). Use asynchronous operations to create performant applications. Add dynamic components and unmanaged libraries to a C# program. Understand the use of generics and generic collections. Retrieve metadata from types using .NET reflection.

Detailed Course Outline

1 - C# Syntax

- Writing Applications in C# and .NET
- Types of Data and Expressions
- C# Language Constructs

2 - C# Language Concepts

- Methods
- Method Overloading
- Exception Handling
- Monitoring

3 - C# Structures, Collections and Events

- Structs
- Enums
- Built-in Collections
- Events

4 - C# Classes

- Creating Classes
- Interfaces
- Understanding Generics in C# **5 - C# Inheritance**
    - Hierarchies of Classes
    - Polymorphism
    - Extending Classes

6 - Input and Output

- File I/O
- Serialization and Deserialization
- Streams

7 - Database Access

- Entity Framework
- LINQ

8 - Using the Network

- Web Services
- REST and OData
- ASP.NET Core MVC

9 - Graphical User Interfaces

- Using UI Frameworks
- Data binding
- Styling the UI

10 - Application Performance

- Multitasking
- Asynchronous Calls
- Dealing with Conflicts

11 - C# Interop

- Dynamic Objects
- Managing Resources

12 - Designing for Reuse

Metadata

- Attributes
- Generating Code
- Assemblies

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Upcoming Schedule

Available training dates for 55339: Programming in C#:

Start Date	End Date	Location	Delivery	Price
04 Jan 2027	08 Jan 2027	Online	Virtual	€2,995.00

Additional Course Details

Nexus Humans 55339 Programming in C# training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the 55339 Programming in C# course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

Frequently Asked Questions

Q: What delivery options are available for 55339: Programming in C#?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: How many CPD hours does this course provide?

The 5-day 55339: Programming in C# course provides up to 32.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the 55339: Programming in C# training?

The training takes place over 5 day(s), with each day lasting approximately 40.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for 55339: Programming in C#?

Yes, we provide corporate training, dedicated training, and closed classes for 55339: Programming in C#. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: Why choose Nexus Human for 55339: Programming in C#?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your 55339: Programming in C# training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

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