

# Fast track C#

# 3 day training course







# **Course contents**

This course will cover the following topics. Those marked with (\*) will be covered if time allows.

### From our Introduction to Visual C# course

#### **Creating forms**

- Drawing controls
- Formatting forms

#### **Coding form events**

- · Forms and their events
- The two event arguments

#### Laying out your code

- · Commenting out code
- Using regions

#### C# variables

- Creating and using variables
- The types of variable

#### Enumerations and constants (\*)

- Enumerations
- Constants

#### Conditions

- Using IF and ELSE
- The SWITCH statement

#### Modular code

- Passing arguments
- Writing functions

#### Arrays

- Using arrays
- Splitting text

#### Looping

- Looping n times
- WHILE loops
- Looping over collections

#### **Files and folders**

- Stream readers and writers
- The USING statement
- FileInfo and DirectoryInfo

#### Debugging and trapping errors

- The TRY clause
- · Stepping through code
- Setting breakpoints

#### **Using lists**

- Populating lists
- Finding items

#### **Properties in C#**

- RO, WO and RW properties
- Coding properties



# From our Intermediate C# course

#### **Designing classes**

- · The domestic cat object
- Properties and methods
- Encapsulation and exposure

#### **Creating classes**

- Using namespaces
- Creating constructors
- Fields, properties and methods
- Static members

#### The form as a class

- · Partial classes
- InitalizeComponent method
- Instantiating forms

#### **Data structures**

- Generics
- Arrays
- · Lists, stacks and queues
- Dictionaries

#### **Overloading (\*)**

- · Overloaded methods
- · Overloading constructors

#### LINQ theory

- · Extension methods
- · lenumerability
- Query vs. method syntax

#### Writing LINQ

- Arrays, lists and data tables
- Criteria and ordering
- Using LET expressions

#### Advanced LINQ (\*)

- Projecting data
- Anonymous types
- Forcing query execution
- Taking and skipping

#### **Types of model**

- Code first
- Model first
- Database first

#### **Entity Frameworks**

- · Creating entity data models
- Data contexts
- Updating models

#### LINQ with Entity Frameworks

- Creating a data context
- · Selecting data using LINQ
- Using relationships (associations)
- · Adding, editing and deleting

#### Advanced LINQ with EF (\*)

- · Returning anonymous types
- Using stored procedures
- Extending (partial classes)

#### Grouping using LINQ (\*)

- IGrouping and IEnumerable
- Grouping keys
- · Group into and ordering
- Using multiple keys



# **Pre-requisites for Fast track C# course**

You don't need any programming experience to attend this course (although if you've used other languages this will be useful), but you do need to be a quick learner. If you strugged with maths at school this probably isn't the right course for you!

### **Prices**

Venue	Address	Price per place
London	Landmark, 99 Bishopsgate, London EC2M 3XD	£1,995 per person + VAT
Manchester	Holiday Inn, 25 Aytoun Street, Manchester M1 3AE	£1,695 per person + VAT
Online	Your home or office!	£1,350 per person + VAT

# Scheduled Dates

Dates	Venue	Times	Price per place	Booking
Wed/Fri 16-18 July 2025	Online	09:30-16:30	£1,350 + VAT	Book this
Wed/Fri 17-19 September 2025	Online	09:30-16:30	£1,350 + VAT	Book this
Mon/Wed 24-26 November 2025	Online	09:30-16:30	£1,350 + VAT	Book this
Mon/Wed 02-04 February 2026	Online	09:30-16:30	£1,350 + VAT	Book this
Mon/Wed 02-04 March 2026	Online	09:30-16:30	£1,350 + VAT	Book this

If you can't see the dates that you want, ask us about organizing a customized course at your office (we'll provide and set up the computers), or else an online course tailored to your needs.