Course Aims:

This course is designed to provide developers, who already have some C# experience, with the experience they need to develop more complex C# applications for the Microsoft .NET platform.

Course Outline:

Review of The Microsoft .NET Platform:

- The .NET platform
- The .NET framework
- The Common Language Runtime environment

Windows Forms:

- Windows forms applications
- Adding controls to forms
- Windows events

Menus:

- Menu properties
- Menu Events
- Pop up menus

Data Validation:

- Validation events
- The ErrorProvider control

Advanced Controls:

- Splitter windows
- Docking controls and panels
- Treeview control
- Listview control

Advanced Windows & Dialogs:

- MDI
- Creating dialogs
- Common Dialog control

Creating New & Extending Existing Controls:

- User controls
- Subclassing existing controls

The Windows Registry:

- The registry class
- The RegistryKey class

Serialisation:

- Simple serialization
- Inheritance & serialisation
- Serializing contained classes

Databases & ADO.NET:

- Connecting to a database
- Accessing data
- Displaying data in a forms application

Working With Datasets:

- Data binding
- Disconnected datasets

Working with XML:

- The structure of XML
- XML Schemas
- Creating & using a schema

ASP .NET:

- Web server requests & responses
- Managing state
- Server controls
- Event handlers

ASP .NET Validation:

- Server validation
- Client validation

Web Forms:

- Managing Security
- Querying data
- Data on demand
- Editing data

Web Forms:

- DataGrid control
- Navigating between forms
- Other data controls

Web Services:

- SOAP
- Web Service Description Language
- Building & using a web service
- Asynchronous web services

Multithreaded Applications:

- Thread pool
- Thread synchronisation

Office Automation:

- Primary Interop Assembly
- Adding a reference

Distributing Applications:

- Packaging Issues
- Packaging Tools

Target Audience:

Systems and applications programmers who will be developing systems in C#. Anyone who wants a practical understanding of C# will benefit from this course. It is suitable for software developers who want to expand their knowledge in a powerful all-purpose language.

Assumed Knowledge:

Participants should have a good knowledge of programming techniques and at least a basic knowledge of the C# language equivalent to that obtained from the C# programming introduction course.