

# Visual Studio 2008 Update

Duration:	1 day
Type:	intermediate

## Description

This course enables .NET developers to make use of the new features introduced in Visual Studio 2008

Delegates start with the language features introduced in C# version 3 and then see how these features work in combination to enable the LINQ syntax. The object, XML and SQL Server implementations of LINQ are covered in detail, plus an overview of its role in the ADO .NET Entity Framework.

Following this delegates cover the enhancements to Web Application development in VS2008, these being support for AJAX based controls and the Windows Communication Foundation. The architecture of AJAX is covered in depth, including the components provided in the ASP .NET AJAX Control Toolkit.

## Prerequisites

Delegates must be experienced C# developers who are familiar with ADO .NET and ASP .NET.

## List of Modules

### New C# Language Features

- Local Type Inference
- Anonymous Types
- Object Initialization Syntax
- Extension Methods
- Generated Properties
- Lambda Expressions
- Partial Methods

### Language Integrated Query (LINQ)

- The basic syntax of a LINQ query
- Data sources that support LINQ queries
- The IEnumerable and IQueryable interfaces
- How LINQ to objects is implemented
- How other implementations use providers
- Running queries against collections of objects
- Running queries against XML documents
- Running queries against a SQL Server database
- Combining LINQ with the Entity Framework

## Introducing AJAX in ASP .NET

- Review of AJAX Core Concepts
- The ASP enhancements to JavaScript
- The role of the *ScriptManager* control
- Placing standard controls in an *UpdatePanel*
- Best practises for using *UpdatePanels*
- Calling Web Services asynchronously via AJAX
- Creating AJAX enabled ASP Web Controls
- Writing extenders to enhance controls
- Working with the AJAX Control Toolkit

## The Windows Communication Foundation (WCF)

- Review of existing distributed technologies
- How older methods are unified in WCF
- Building services via code and config files
- Defining service contracts using WSDL
- Choosing protocol and transport channels
- Bindings which come preconfigured with WCF
- Customizing your service with behaviors
- Creating clients for WCF services