

---

## Developing Microsoft ASP.NET Web Application Using Visual Studio .NET

**Duration: 5 Days**    **Course Code: M2310**

---

### Overview:

This instructor-led course will teach Microsoft Visual Basic® programmers and beginning Web developers the fundamentals of Web application site implementation by using Microsoft ASP.NET and Microsoft Visual Basic .NET. This course focuses on using the Microsoft Visual Studio® .NET environment and the Microsoft .NET platform to create an ASP.NET Web application that delivers dynamic content to a Web site.

---

### Target Audience:

This course is intended for beginning Web developers who have knowledge of the Hypertext Markup Language (HTML) or dynamic HTML (DHTML), along with some knowledge of a scripting language, such as Visual Basic Scripting Edition or Microsoft JScript®. This course is also appropriate for Visual Basic 6.0 developers wanting to learn ASP.NET.

---

### Objectives:

- At the end of this course delegates will be able to;
  - Explain the Microsoft .NET Framework and ASP.NET
  - Create a component in Visual Basic .NET or C#.
  - Create an ASP.NET web application project using Visual Studio.NET
  - Add server controls to an ASP.NET Web Form.
  - Create and populate ASP.NET Web Forms.
  - Add functionality to server controls on an ASP.NET Web Form.
  - Use the Trace & Debug objects provided with Visual Studio .NET
  - Use validation controls to validate user input & create a user control.
  - Accomplish data access tasks from an ASP.NET Web application
  - Access Extensible Markup Language (XML) data & read it into a DataSet.
  - Call an XML Web service from an ASP.NET Web application and incorporate the returned data into a Web application.
  - Store application and session data by using a variety of methods.
  - Configure and deploy an ASP.NET Web application.
  - Secure an ASP.NET Web application using a variety of technologies.
- 

### Prerequisites:

Delegates are required to meet the following prerequisites:

- Completing M1912—Introduction to Web Development Technologies.
- Or have the following skills
- Have the ability to create HTML or DHTML, including Tables, Images, Forms
- AND
- Programming experience using Visual Basic .NET, including declaring variables, using loops & Using conditional statements
- In addition, it is recommended, that delegates have completed:
- M2559 Introduction to Visual Basic .NET programming
  - M2373 Programming with Microsoft Visual Basic .NET
- OR
- M2124 Programming with C#

### Testing and Certification:

Recommended as preparation for exam(s):

- M2310, M2373 & M2389 - Developing and Implementing Web Applications with Microsoft Visual Basic® .NET and Microsoft Visual Studio® .NET (Microsoft Exam 70-305)
  - M2310, M2124 & M2389 - Developing and Implementing Web Applications with Microsoft Visual C#™ .NET and Microsoft Visual Studio & eg: .NET (Microsoft Exam 70-315)
-

---

## Follow-on-Courses:

The following courses are recommended for further study:

- M2389 Programming with Microsoft ADO.NET
- 

## Content:

### **Overview of the Microsoft .NET Framework**

- Introduction to the .NET Framework ; overview of ASP.NET
- Overview of the Lab Application Resources

### **Using Microsoft Visual Studio .NET**

- Creating an ASP.NET Web Application Project

### **Validating User Input**

- Overview of User Input Validation
- Using Validation Controls
- Page Validation

### **Creating User Controls**

- Adding User Controls to an ASP.NET Web Form ; Creating User Controls

### **Reading and Writing XML Data**

- Overview of XML Architecture in ASP.NET
- XML and the DataSet Object
- Working with XML Data
- Using the XML Web Server Control

### **Consuming ; Creating XML Web Services**

- Using a Proxy to Call an XML Web Service
- Creating an XML Web Service

### **Using Microsoft .NET-Based Languages**

- Comparison of the .NET-Based Languages
- Creating a Component Using Visual Studio .NET

### **Creating a Microsoft ASP.NET Web Form**

- Creating Web Forms ; Using Server Controls

### **Adding Code to a Microsoft ASP.NET Web Form**

- Using Code-Behind Pages
- Adding Event Procedures to Web Server Controls
- Using Page Events

### **Tracing in Microsoft ASP.NET Web Applications**

- Understanding Tracing ; Remote Debugging

### **Accessing Relational Data Using Microsoft Visual Studio .NET**

- Overview of ADO.NET
- Creating a Connection to the Database
- Displaying a DataSet in a List-Bound Control

### **Accessing Data with Microsoft ADO.NET**

- Introduction to Using ADO.NET
- Connecting to a Database
- Accessing Data with DataSets
- Using Multiple Tables
- Accessing Data with DataReaders

### **Calling Stored Procedures with Microsoft ADO.NET**

- Overview of Stored Procedures
- Calling Stored Procedures

### **Managing State**

- State management
- Application and Session Variables
- Cookies and Cookieless Sessions

### **Configuring, Optimising ; Deploying a Microsoft ASP.NET Web Application**

- Using the Cache Object
- Using ASP.NET Output Caching
- Configuring an ASP.NET Web Application
- Deploying an ASP.NET Web Application

### **Helping to Protect a Microsoft ASP.NET Web Application**

- Web Application Security Overview
  - Working with Windows-Based Authentication
  - Working with Forms-Based Authentication
  - Overview of Microsoft Passport Authentication
- 

## Additional Information:

This course is taught using 2002. For 2005 please see M2543 & M2544.

---

## Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 01924 377489

[info@globalknowledge.co.uk](mailto:info@globalknowledge.co.uk)

[www.globalknowledge.co.uk](http://www.globalknowledge.co.uk)

Global Knowledge, Mulberry Business Park, Fishponds Road, Wokingham Berkshire RG41 2GY UK