

ASP.NET 4.0 Programming for Experienced C# Programmers

Duration: 3 Days | **Price:** £995 + VAT

Course Description: This course provides students with hands on experience using Visual Studio to create dynamic web applications with the ASP.NET 4.0 Framework using C#. Students learn how to leverage the power of the .NET Framework to build web user interfaces. Students will learn how to build web forms and work with a variety of ASP.NET controls, including validation controls and user controls. Students explore why state management is difficult within web applications and learn many different ASP.NET techniques for managing state, including application, session and view state objects, as well as effective use of cookies. Students also learn how to use ADO.NET to interact with data sources and display data.

Other topics include: error handling and debugging; using Web.config to control application configuration; uploading files and sending e-mail; using master pages to provide a consistent look and feel to a web application; developing and consuming web services; file I/O; using XML data with DataSets; and deploying ASP.NET applications. Comprehensive labs and exercises provide the students with experience creating and deploying dynamic web applications.

This course provides thorough coverage of the use of **Web Forms** for web applications. Students requiring additional coverage of **Windows Forms** or **Windows Presentation Foundation** should contact HOTT to discuss additional training available.

Students unfamiliar with the C# programming language should register for the 5-day [ASP.NET 4.0 Programming Using C#](#) course instead.

Course Prerequisites: Knowledge of fundamental HTML syntax is helpful, but not required. Prior experience with C# is required.

ASP.NET 4.0 Programming for Experienced C# Programmers Course Overview:

Introducing ASP.NET

- Overview of ASP.NET 4.0
- Understanding Client-Side vs. Server-Side Execution
- Working with Web Forms
- Understanding ASP.NET Application Folders
- Using Web.config

Using Controls

- Working with HTML Controls
- Working with Web Controls
- Creating Controls at Runtime
- Defining and Using Custom User Controls

Creating ASP.NET Pages

- Building ASP.NET Pages
- Using Page Directives
- Working with the Code-Behind Model
- Understanding the Life-cycle of a Web Form
- Handling Page Events

Handling Events

- Understanding the Event Driven Programming Model
- Writing Event Handlers
- UnderstandingPostBack versus Non-PostBack Events
- Sharing Event Handlers between Events
- Using Global.asax

Validation

- Understanding the ASP.NET Validation Controls
- Performing Client-Side Validation
- Performing Server-Side Validation
- Using the Regular Expression Validator
- Customizing Validation
- Working with Validation Groups

Maintaining State

- Understanding why the Web is Stateless
- Maintaining State within ASP.NET Applications
- Using the Application Object
- Using the Session Object
- Using the ViewState Object
- Reading and Writing Cookies
- Using the Query String

Using XML

- Understanding XML and XML Schemas
- Reading XML Data with a DataSet
- Writing XML Data with a DataSet

Securing ASP.NET Applications

- Understanding the ASP.NET 4.0 Security Models
- Authenticating Users
- Authorization User Requests
- Using the ASP.NET Login Controls
- Using the ASP.NET Web Site Administration Tool

Deploying ASP.NET Applications

- Overview of ASP.NET Deployment Options
- Using Copy Web Site Tool
- Using Publish Web Site Tool
- Using Web Setup Projects

Master Pages

- Understanding the Master Page Architecture
- Designing a Master Page
- Designing Content Pages

ADO.NET

- Understanding the ADO.NET Object Model
- Connected vs. Disconnected Access
- Using a Connection to Connect to a Data Source
- Using a Command to Execute Queries and Stored Procedures
- Using a DataReader to Work with Cursors
- Using the DataSet with Disconnected Data
- Using DataAdapters with DataSets

Data Binding

- Understanding ASP.NET Data Binding
- Examining ASP.NET Data Bound Controls
- Using the ListBox Control
- Using the GridView Control
- Using the DetailsView Control
- Using the FormView Control

Introduction to Web Services

- Overview of Web Services
- Creating a Web Service
- Using WSDL and Proxy Classes
- Consuming a Web Service

Student Testimonials

"The instructor did an amazing job. This was one of the best classes I've taken. The class passed all my expectations. Because of this experience I will certainly recommend and consider HOTT for future

training."

– C.N., The Federal Reserve Bank of Chicago

Hands On Technology Transfer, Inc.

The Old Post House

91 Heath Road

Weybridge Surrey

KT13 8TS

Phone: 0870 063 2964

www.traininghott.co.uk

Copyright© 2011 Hands On Technology Transfer, Inc.