

10264AC

**Developing Web
Applications with
Microsoft Visual Studio
2010**

5 DAYS

In this course, students will learn to develop advanced ASP.NET MVC and Web Forms applications using .NET Framework 4 tools and technologies. The focus will be on coding activities that enhance the performance and scalability of the Web site application. ASP.NET MVC will be introduced and compared with Web Forms so that students know when each should/could be used. This will also prepare the student for exam 70-515.

Module 1: Overview of Web Application Design

Overview of IIS 7.0
Overview of ASP.NET 4.0
Introduction to the MVC Framework
Overview of the Request Life Cycle

Module 2: Designing a Web Application

Web Applications: Case Studies
Web Application Design Essentials
Guidelines for Determining When to Use Web Forms and MVC
Visual Studio 2010 Tools and Technologies for Web Application Design

Module 3: Developing MVC Models

Exploring Ways to Create MVC Models
Creating a Data Repository

Module 4: Developing MVC Controllers

Implementing MVC Controllers
Creating Action Methods

Module 5: Developing MVC Views

Implementing MVC Views
Implementing Strongly-Typed MVC Views
Implementing Partial MVC Views

Module 6: Designing for Discoverability

Overview of Search Engine Optimization
Creating the Robots and Sitemap Files
Using ASP.NET Routing

Module 7: Writing Server-Side Code for Web Forms

- Overview of the Structure of a Web Application
- Controlling ViewState
- Localizing a Web Application
- Persisting Data on a Web Forms Page
- Validating User Input

Module 8: Optimizing Data Management for Web Forms

- Managing Data by Using LINQ to Entities
- Using Data Source Controls
- Using ASP.NET Dynamic Data

Module 9: Ensuring Quality by Debugging, Unit Testing, and Refactoring

- Debugging and Refactoring Code
- Unit Testing Code
- Processing Unhandled Exceptions
- Test Driven Development

Module 10: Securing a Web Application

- Configuring Authentication
- Configuring ASP.NET Membership
- Managing Authorization by Using ASP.NET Roles

Module 11: Applying Master Pages and CSS

- Applying Master Pages
- Applying CSS, Skins, and Themes

Module 12: Developing Client Side Scripts and Services

- Developing Client-Side Scripts
- Implementing AJAX
- Creating Services

Module 13: Implementing Advanced AJAX in a Web Application

- Implementing Ajax in ASP.NET MVC Pages Using Microsoft Ajax
- Implementing Ajax in ASP.NET MVC Pages Using jQuery
- Working With jQuery and Ajax Events

Module 14: Deploying a Web Application

- Overview of Web Application Deployments
- Overview of Web Site Deployments
- Deploying AdventureWorks

Module 15: Developing a Web Application by Using Silverlight

- Introduction to Rich Internet Applications
- Overview of Silverlight
- Creating a Silverlight Application