

**Price:** R10,500.00 excl. VAT  
**Duration:** 5 days  
**Code:** ASPNT

## ASP.NET MVC Development

### Description

ASP.NET is a development framework for building web applications. MVC (Model-View-Controller) is a way to handle a complex system by dividing it into parts. This course will teach you how to develop web-based applications using the .NET framework and the C# programming language. You will learn how to use MVC to create web systems that are easier to maintain and customise.

### Objectives

After you have completed the ASP.NET MVC Development course, you will be able to:

- Develop web applications using ASP.NET
- Understand how to use MVC to make your code better and easier to maintain.
- Use Razor syntax to embed server-based code in your web page.
- Create a dynamic web site that delivers content based on the user's choices.

### Intended Audience

You should attend the ASP.NET MVC Development course if:

- You are a C# programmer and you want to learn to develop web applications using ASP.NET.
- You are a C# programmer and you need to support web applications that use ASP.NET.
- You have already learnt some ASP.NET, but you want to learn about MVC or close the gaps in your knowledge.

### Prerequisites

Before you attend the ASP.NET MVC Development course:

- You must have attended our HTML and CSS course or have experience using HTML and CSS.
- You must have attended our C# Programming course or be able to program in C#. You should have at least 6 months practical experience programming in C#.
- You will find it useful to know some SQL. It is not essential for this course, but it is a good idea to add our SQL Fundamentals course to your training program.

### Course Contents

#### **Introduction to ASP.NET MVC**

- ASP.NET MVC.
- The MVC Pattern.
- MVC as Applied to Web Frameworks.
- Convention and Configuration.

#### **Controllers and Views**

- Role of Controllers.
- Controller Actions.
- Parameters in Actions.
- View Conventions.
- Strongly Typed Views.
- View Models.
- The Razor View Engine and Razor Syntax.

- Partial Views.

### **Routing**

- Uniform Resource Locators.
- Routing verses Rewriting.
- Attribute Routes vs. Traditional Routes.
- StopRoutingHandler and IgnoreRoute.
- URL Generation.
- Route Constraints.
- Catch-All parameter.

### **Models**

- Scaffolding.
- Code First Conventions.
- Entity Framework and Data Context.
- Database Initializers.
- Models and View Models.
- Model Binding.

### **Forms and HTML Helpers**

- The Action and the Method.
- HTML Helpers.
- Encoding and Binding.
- Helpers, Models and ViewData.
- Strongly Typed Helpers.
- ModelState.

### **Data Annotations and Validation**

- Annotating Orders for Validation.
- Custom Validation Logic.
- Display and Edit Annotations.
- IValidatableObject.

### **Membership, Authorization, and Security**

- Using the authorize attribute to require login.
- Using authorizeattribute to require role membership.
- Extending user identity.

### **Miscellaneous**

- Unit Testing.
- Extending MVC.
- Single Page Applications with AngularJS.
- ASP.NET MVC 5.1.

*\*\* The lecturer reserves the right to modify the contents of the course to suit the needs of the delegates.*