



Information Technology

# Developing ASP.NET MVC 4 Web Applications

## Course Introduction

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This training course is designed to enable participants specifically professional web developers to develop advanced ASP.NET Core MVC applications using the .NET Core tools and technologies. The course will focus on coding activities that enhance the performance and scalability of the Web site application. This course will also prepare the student for exam 70-486.

## Target Audience

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This training course is designed for professional web developers who use Microsoft Visual Studio in an individual-based or team-based, small-sized to large development environment. Candidates for this course are interested in developing advanced web applications and want to manage the rendered HTML comprehensively. They want to create websites that separate the user interface, data access, and application logic.

## Learning Objectives

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- Gain a comprehensive understanding of Microsoft Web Technologies stack and select an appropriate technology to use to develop any given application.
- Design the architecture and implementation of a web application that will meet a set of functional requirements, user interface requirements, and address business models.
- Configure the pipeline of ASP.NET Core web applications using middleware, and leverage dependency injection across MVC application.
- Develop a web application that uses the ASP.NET Core routing engine to present friendly URLs and a logical navigation hierarchy to users.

- Create Views in an MVC application that display and edit data and interact with Models and Controllers, MVC Models and write code that implements business logic within Model methods, properties, and events.
- Connect an ASP.NET Core application to a database using Entity Framework Core.
- Implement a consistent look and feel across an entire MVC web application.
- Write JavaScript code that runs on the client-side and utilizes the jQuery script library to optimize the responsiveness of an MVC web application.
- Add client side packages and configure Task Runners.
- Run unit tests and debugging tools against a web application in Visual Studio 2017.
- Write an MVC application that authenticates and authorizes users to access content securely using Identity.
- Build an MVC application that resists malicious attacks.
- Use caching to accelerate responses to user requests and SignalR to enable two-way communication between client and server.
- Describe what a Web API is and why developers might add a Web API to an application.
- Package and deploy an ASP.NET Core MVC web application from a development computer to a web server.

## Course Outline

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- **Day 01**
  - Module 1: Exploring ASP.NET Core MVC
  - Module 2: Designing ASP.NET Core MVC Web Applications
  - Module 3: Configure Middlewares and Services in ASP.NET Core
- **Day 02**
  - Module 4: Developing Controllers
  - Module 5: Developing Views
  - Module 6: Developing Models
- **Day 03**
  - Module 7: Using Entity Framework Core in ASP.NET Core
  - Module 8: Using Layouts, CSS and JavaScript in ASP.NET Core MVC
  - Module 9: Client-Side Development
- **Day 04**
  - Module 10: Testing and Troubleshooting
  - Module 11: Managing Security

- Module 12: Performance and Communication
- **Day 05**
  - Module 13: Implementing Web APIs
  - Module 14: Hosting and Deployment

## Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
May 26, 2025	May 30, 2025	5 days	4250.00 \$	UAE - Dubai
July 28, 2025	Aug. 1, 2025	5 days	4950.00 \$	Netherlands - Amsterdam
Aug. 11, 2025	Aug. 15, 2025	5 days	4950.00 \$	England - London
Dec. 8, 2025	Dec. 12, 2025	5 days	4250.00 \$	UAE - Abu Dhabi