

## 20486 Developing ASP.NET Core MVC Web Applications

### Prehľad

In this course, the professional web developers will learn to develop advanced ASP.NET Core MVC applications using .NET Core tools and technologies. The focus will be 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.

### Vzdelávacie ciele

After completing this course, students will be able to:

- Describe the 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.
- Add Controllers to an MVC Application to manage user interaction, update models, and select and return Views.
- 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.
- Create 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.
- Use 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.
- Describe how to package and deploy an ASP.NET Core MVC web application from a development computer to a web server.

### 1 - Exploring ASP.NET MVC 5

Overview of Microsoft Web Technologies  
 Overview of ASP.NET  
 Introduction to ASP.NET MVC 5  
 Lab : Exploring ASP.NET MVC 5

### 2 - Designing ASP.NET MVC 5 Web Applications

Planning in the Project Design Phase  
 Designing Models, Controllers, and Views  
 Lab : Designing ASP.NET MVC 5 Web Applications

[Online registrácia](#)

### Termíny

Trvanie kurzu (v dňoch): 5 Days

G2R = "Garantovaný termín" | OLL = "Online LIVE"  
 ILT = "Kurz vedený inštruktorom"

10/04/21	G2R	3:00PM - 11:00PM	Bratislava, Slovakia	OLL	€ 0.00
11/29/21	G2R	3:00PM - 11:00PM	Bratislava, Slovakia	OLL	€ 0.00

### 3 - Developing ASP.NET MVC 5 Models

Creating MVC Models  
Working with Data  
Lab : Developing ASP.NET MVC 5 Models

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### 4 - Developing ASP.NET MVC 5 Controllers

Writing Controllers and Actions  
Writing Action Filters  
Lab : Developing ASP.NET MVC 5 Controllers

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### 5 - Developing ASP.NET MVC 5 Views

Creating Views with Razor Syntax  
Using HTML Helpers  
Reusing Code in Views  
Lab : Developing ASP.NET MVC 5 Views

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### 6 - Testing and Debugging ASP.NET MVC 5 Web Applications

Unit Testing MVC Components  
Implementing an Exception Handling Strategy  
Lab : Testing and Debugging the ASP.NET MVC 5 Web Applications

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### 7 - Structuring ASP.NET MVC 5 Web Applications

Analyzing Information Architecture  
Configuring Routes  
Creating a Navigation Structure  
Lab : Structuring ASP.NET MVC 5 Web Applications

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### 8 - Applying Styles to ASP.NET MVC 5 Web Applications

Using Layouts  
Applying CSS to an MVC Application  
Creating an Adaptive User Interface  
Lab : Applying Styles to ASP.NET MVC 5 Web Applications

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### 9 - Building Responsive Pages in ASP.NET MVC 5 Web Applications

Using AJAX and Partial Page Updates  
Implementing a Caching Strategy  
Lab : Building Responsive Pages in ASP.NET MVC 5 Web Applications

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## 10 - Using JavaScript and jQuery for Responsive MVC 5 Web Applications

Rendering and Executing JavaScript Code

Using jQuery and jQueryUI

Lab : Using JavaScript and jQuery for Responsive MVC 5 Web Applications

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## 11 - Controlling Access to ASP.NET MVC 5 Web Applications

Implementing Authentication and Authorization

Assigning Roles and Membership

Lab : Controlling Access to ASP.NET MVC 5 Web Applications

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## 12 - Building a Resilient ASP.NET MVC 5 Web Application

Developing Secure Sites

State Management

Lab : Building a Resilient ASP.NET MVC 5 Web Application

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## 13 - Implementing Web APIs in ASP.NET MVC 5 Web Applications

Developing a Web API

Calling a Web API from Mobile and Web Applications

Lab : Implementing Web APIs in ASP.NET MVC 5 Web Applications

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## 14 - Handling Requests in ASP.NET MVC 5 Web Applications

Using HTTP Modules and HTTP Handlers

Using Web Sockets

Lab : Handling Requests in ASP.NET MVC 5 Web Applications

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## 15 - Deploying ASP.NET MVC 5 Web Applications

Deploying a Web Application

Deploying an ASP.NET MVC 5 Web Application

Lab : Deploying ASP.NET MVC 5 Web Applications

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