



MICROSOFT TRAINING

AZ-202: Develop an ASP.NET Core Web App that Consumes an API

Master ASP.NET Core web app development and API consumption to ace your Microsoft AZ-202 certification.

DURATION

4 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

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COURSE OVERVIEW

This intensive 4-hour intermediate course, "AZ-2002: Develop an ASP.NET Core Web App that Consumes an API," is meticulously designed for developers looking to master the art of integrating client-side ASP.NET Core applications with external data sources via APIs. You will gain hands-on experience in building robust web applications that seamlessly interact with various API types, ensuring dynamic and data-driven user experiences. The course delves into essential concepts like making HTTP requests, handling responses, parsing data formats such as JSON, and implementing best practices for error handling and data security when consuming external services.

By the end of this course, you will possess a solid understanding of how to architect and implement API consumption within the ASP.NET Core ecosystem, a crucial skill for modern web development. This certification not only enhances your technical proficiency in C# and the .NET Core framework but also significantly boosts your marketability by demonstrating your capability to build interconnected and scalable web solutions. It's an ideal step for developers aiming to work with microservices, cloud-native applications, or complex enterprise systems that rely heavily on API communication.

Duration	4 hours
Level	Intermediate
Vendor	Microsoft
Exam Code	AZ-2002

COURSE CURRICULUM

01 Module 1: Introduction to Consuming APIs in ASP.NET Core

- Overview of ASP.NET Core MVC/Razor Pages applications
- Understanding RESTful API principles and HTTP methods
- Introduction to HttpClient for making API requests
- Setting up a basic ASP.NET Core project for API consumption

02 Module 2: Making Synchronous and Asynchronous API Calls

- Implementing GET requests to retrieve data
- Working with asynchronous programming (async/await) in C#
- Handling HTTP responses and status codes
- Introduction to data serialization and deserialization (JSON.NET)

03 Module 3: Sending Data to APIs (POST, PUT, DELETE)

- Performing POST requests to create new resources
- Using PUT and PATCH requests for updating resources
- Executing DELETE requests to remove resources
- Sending complex data types in request bodies

04 Module 4: Error Handling and Resiliency

- Implementing robust error handling for API calls
- Understanding common HTTP errors and how to manage them
- Introduction to retry policies and circuit breakers (Polly library)
- Logging API request and response data

Module 5: Advanced API Consumption Patterns

- 05**
- Dependency Injection for HttpClient and API clients
 - Configuring HttpClientFactory for managing HttpClient instances
 - Consuming authenticated APIs (e.g., using API keys or JWT tokens)
 - Best practices for secure API consumption

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Junior to Mid-level ASP.NET Core Developer specializing in API integration**
- > **Full-stack Web Developer focused on backend-to-frontend data flow**
- > **Cloud Application Developer working with Azure services and RESTful APIs**

FREQUENTLY ASKED QUESTIONS

Q: What foundational knowledge should I have before enrolling in the AZ-2002 course to ensure maximum benefit?

To get the most out of this course, participants should have a solid understanding of C# programming fundamentals, including object-oriented programming concepts, asynchronous programming (async/await), and basic knowledge of ASP.NET Core application structure (MVC or Razor Pages). Familiarity with HTTP protocols and RESTful services will also be beneficial.

Q: How does this course specifically help me integrate my ASP.NET Core applications with external payment gateways or third-party services?

This course directly addresses the skills needed for such integrations. You will learn to send complex data structures (like order details to a payment gateway), handle various HTTP methods for different operations, and correctly parse API responses. The principles of error handling, secure API key management, and using HttpClientFactory taught here are critical for building reliable and secure integrations with any external service, including payment gateways, social media APIs, or logistics platforms.

Q: Will this course cover how to manage API keys or tokens securely within an ASP.NET Core application when consuming external APIs?

Yes, Module 5, 'Advanced API Consumption Patterns,' specifically delves into consuming authenticated APIs. This includes practical guidance on how to manage sensitive credentials like API keys and JWT tokens, leveraging ASP.NET Core's configuration system and best practices for secure handling to prevent exposure and ensure your application interacts with external services safely.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

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50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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