



MICROSOFT TRAINING

Powerbi Embedding Advance

Master advanced Power BI embedding techniques. Integrate interactive reports and dashboards into custom applications with ease.

DURATION

56 Hours

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

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COURSE OVERVIEW

This advanced course on Power BI Embedding is designed for developers, architects, and technical professionals looking to integrate Power BI reports, dashboards, and tiles seamlessly into custom applications, websites, or portals. Moving beyond basic iframe embedding, this program delves into the sophisticated techniques required to create truly interactive, secure, and highly customizable embedded analytics experiences. You'll master the Power BI JavaScript API and REST APIs, enabling programmatic control over embedded content, dynamic filtering, and deep integration with your application's user interface and backend systems.

Participants will gain expertise in critical areas such as implementing Row-Level Security (RLS) for embedded content, managing authentication and authorization with Azure Active Directory (Azure AD) service principals, and optimizing performance for large-scale deployments. The course focuses on practical, hands-on application, equipping you with the skills to build robust, scalable, and secure embedded analytics solutions that enhance user engagement and drive data-informed decision-making within your applications. This expertise is crucial for organizations aiming to deliver personalized data experiences directly to their end-users, customers, or partners, transforming raw data into actionable insights at the point of need.

Duration	56 Hours
Level	Intermediate
Vendor	Microsoft

COURSE CURRICULUM

01 Module 1: Foundations of Advanced Power BI Embedding

- Review of Power BI Embedding Types (for your organization, for your customers)
- Understanding the Power BI JavaScript API Architecture and Core Concepts
- Introduction to Power BI REST APIs for Embedding
- Setting up Your Development Environment: Azure App Registration, Service Principals
- Embedding Reports, Dashboards, and Tiles Programmatically
- Handling Embedded Component Events and Interactions

02 Module 2: Advanced Authentication and Authorization for Embedding

- Azure Active Directory (Azure AD) for Service Principal Authentication
- Generating Embed Tokens for Secure Access
- Implementing Row-Level Security (RLS) in Embedded Reports
- Dynamic RLS based on Application User Context
- Granting Permissions and Managing Access for Embedded Content
- Best Practices for Token Management and Refresh

03 Module 3: Customization and Interactivity with JavaScript API

- Applying Custom Themes and Layouts to Embedded Reports
- Programmatic Filtering and Slicing of Data
- Exporting Data from Embedded Visuals
- Creating Custom Navigation and Bookmarks
- Integrating with External Application Controls and Event Handling
- Embedding Q&A for Natural Language Querying

Module 4: Enterprise-Scale Embedding and Performance Optimization

- 04**
- Strategies for Multi-Tenant Power BI Embedding
 - Implementing Data Ownership and Data Separation
 - Optimizing Embedded Report Performance and Loading Times
 - Capacity Management and Resource Allocation for Embedding
 - Troubleshooting Common Embedding Issues
 - Monitoring Embedded Analytics Usage and Performance

05 **Module 5: Automation and Advanced Deployment Scenarios**

- Using Power BI REST APIs for Dataset and Report Management
- Automating Report Deployment and Updates
- Integrating Embedding with CI/CD Pipelines
- Embedding Power BI Paginated Reports and Mobile Layouts
- Advanced Scenarios: Embedding with SharePoint Online and Microsoft Teams
- Future Trends in Power BI Embedding and API Updates

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Senior Application Developer with Embedded Analytics Specialization**
- > **Business Intelligence Solutions Architect**
- > **Product Manager for Data-Driven Applications**

FREQUENTLY ASKED QUESTIONS

Q: What are the specific prerequisites for enrolling in the Power BI Embedding Advance course?

This course assumes a foundational understanding of Power BI Desktop for report creation, familiarity with the Power BI Service, and basic web development skills (HTML, CSS, JavaScript). Prior exposure to Power BI embedding, even at a basic iframe level, will be beneficial, along with a conceptual understanding of REST APIs and authentication mechanisms like Azure Active Directory.

Q: How will this course specifically prepare me to implement secure, multi-tenant Power BI embedding solutions for a SaaS application?

This course dedicates significant modules to multi-tenancy. You will learn how to leverage Azure AD Service Principals, generate dynamic embed tokens for 'embedding for your customers' scenarios, and deeply implement Row-Level Security (RLS) to ensure each tenant only sees their relevant data. We will cover architectural considerations for scaling securely across multiple clients within a single Power BI tenant.

Q: Beyond basic embedding, what complex customization capabilities will I master to enhance user interaction within embedded reports?

You will master the Power BI JavaScript API to programmatically interact with embedded reports. This includes applying custom themes dynamically, implementing custom filters based on your application's state, responding to report events (e.g., page changes, visual selections), and even creating custom navigation within the embedded experience. The goal is to make Power BI reports feel like an intrinsic part of your application, not just an iframe.

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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