

## PL-400T00: Microsoft Power Platform Developer

**Course Duration: 40 Hours**

**Course code: PL-400T00**

### 1. Course Overview

The **PL-400T00: Microsoft Power Platform Developer** course equips developers with the skills to extend and customize Microsoft Power Platform components—Power Apps, Power Automate, Power Virtual Agents, and Power BI. You'll master building professional-grade business solutions by integrating with data sources, implementing complex logic, working with security models, and embedding Power Platform assets into your applications.

### 2. What you'll learn?

By the end of this course, you will be able to:

- Develop robust canvas, model-driven, and portal apps using Power Apps.
- Automate business processes and orchestrate workflows with Power Automate.
- Extend functionality through custom connectors, web APIs, and Azure Functions.
- Implement validation, business logic, and UI enhancements with JavaScript and Power FX.
- Integrate secure, compliant data access using Microsoft Dataverse and external data sources.
- Configure and enforce security models, roles, permissions, and data policies.
- Manage deployment of solutions across environments with Solution Packs and ALM (Application Lifecycle Management).
- Troubleshoot, monitor, and optimize applications using Power Platform admin tools.

### 3. Target Audience

This course is ideal for:

- Pro developers experienced with .NET, JavaScript, RESTful APIs, or web technologies.
- Power Platform specialists looking to deepen their technical skillset.
- Software architects designing enterprise-grade solutions with Microsoft technologies.
- Technical consultants and solution engineers building custom Power Platform implementations.

### 4. Pre-Requisites

Learners should have:

- Professional development experience in C#, .NET, or another object-oriented language.
- Basic proficiency in JavaScript, HTML, CSS, and RESTful APIs.
- Understanding of relational databases and structured query usage.
- Foundation in Azure services, web authentication, and cloud delivery models.
- (Optional) Familiarity with Power Apps and Power Automate.

### 5. Course content

#### **Module 1: Introduction to Power Platform Development**

- Course overview and capabilities
- Developer tools: Power Apps CLI, Visual Studio Code, Dataverse SDK

#### **Module 2: Canvas App Development**

- Data integration with connectors
- Power FX and logic expression authoring
- Custom APIs and UI Components

### **Module 3: Model-Driven Apps & Dataverse**

- Dataverse schema, tables, and relationships
- Business rules and process flows
- JavaScript and Ribbon/Command customizations

### **Module 4: Power Automate**

- Building secure cloud flows
- Custom connector creation and deployment
- Integration with Dataverse and APIs

### **Module 5: Developer Extensibility**

- Azure Function integration
- Plugin development for server-side logic
- Use of Power Platform Build Tools (ALM)

### **Module 6: Application Lifecycle Management**

- Solution architecture and packaging
- Environment strategies, source control, and ALM pipelines

### **Module 7: Security & Compliance**

- Principal Object Access, Teams, and Role-Based Security
- Data Loss Prevention (DLP) policies
- Tenant-level governance

### **Module 8: Testing, Monitoring & Performance**

- Unit and UI testing strategies

- Performance troubleshooting with Tools for Makers/Admins

## **Module 9: Power Virtual Agents & Embedded Analytics**

- Embedding virtual agents in canvas apps
- Extending bots via Power Automate
- Embedding Power BI visuals into Power Apps

## **Module 10: Capstone Project & Exam Prep**

- End-to-end solution development
- Practice exam scenarios
- Guidance for achieving Microsoft PL-400 certification

