



## PL-400T00 Microsoft Power Platform Developer

### Summary

Length: 40 hours Level: Advanced

The Microsoft Power Platform helps organizations optimize their operations by simplifying, automating and transforming business tasks and processes. In this course, students will learn how to build Power Apps, Automate Flows and extend the platform to complete business requirements and solve complex business problems.

### Learning Objectives

After completing this course, students will be able to:

- Create a technical design
- Configure Common Data Service
- Create and configure Power Apps
- Configure business process automation
- Extend the user experience
- Extend the platform
- Develop Integrations

### Course Outline

#### 1. Becoming a Solution Architect/Getting to know your customer

- Define a Solution Architect
- Role of a Solution Architect on projects
- Project Methodology
- Getting to know your customer
- Group exercise - Getting to know your customer

#### 2. Create a model-driven application in Power Apps

This module introduces you to creating a model-driven app in Power Apps that uses Common Data Service.

#### 3. Get started using Common Data Service

This module will explain the concepts behind and benefits of Common Data Service. Creating an environment, entities, fields and options sets are also discussed.

#### 4. Conceptualizing the design from requirements

- How to lead the requirement collection effort
- Using fit gap analysis
- Pillars of good architecture
- Blueprinting the solution architecture
- Group exercise - Design from requirements

#### 5. Project governance and working as a team

- Solution Architect's role in project governance
- Techniques for keeping a project on track
- Scenarios that could cause a project to fail
- Group exercise - Project governance and working as a team

**6. Create a canvas app in Power Apps**

This module introduces you to Power Apps, helps you create and customize an app, and then manage and distribute it. It will also show you how to provide the best app navigation, and build the best UI using themes, icons, images, personalization, different form factors, and controls.

**7. Automate a business process using Power Automate**

This module introduces you to Power Automate, teaches you how to build workflows, and how to administer flows.

**8. Power Platform Architecture**

Key Power Platform architecture components  
Understand how platform design and limits influence solution architectures  
Updates and feature releases  
Understand how to communicate how the platform meets customer needs

**9. Data Modeling**

Data model influences  
Data model strategy  
Data types  
Data relationships  
Group exercise - Data modeling

**10. Create a business process flow in Power Automate**

This module introduces you to creating business process flows in Power Automate

**11. Introduction to developing with Power Platform**

This module is the first step in learning about platform, tools, and the ecosystem of the Power Platform

**12. Analytics and artificial intelligence**

Planning and evaluating requirements  
Operational reporting  
Power BI  
Enterprise BI  
Pre-built insights and custom AI

**13. Power Apps Architecture**

Discuss options for apps and how to choose where to start  
Discuss app composition options  
Using components as part of your app architecture  
Considerations for including Portals as an app in your architecture  
Group exercise - Power Apps Architecture topics

**14. Extending the Power Platform user experience Model Driven apps**

This module describes how to create client scripting, perform common actions with client script, and automate business process flow with client scrip. Learn about what client script can do, rules, and maintaining scripts. Discover when to use client script as well as when not to use client script.

**15. Application Lifecycle Management (ALM)**

Microsoft vision and Solution Architect's role in ALM  
Environment strategies  
Defning a solution structure for your deliverable

## 16. Create components with Power Apps Component Framework

This module describes how to get started with Power Apps Component Framework with an introductory module on the core concepts and components. Then it shows you how to build a component and work with advanced Power Apps Component Framework features.

## 17. Power Automate Architecture

Discuss options for automation and custom logic  
Review considerations for using triggers and common actions  
Explore using Business Process Flows (BPF) to guide users through business processes  
Group Exercise - Evaluate scenarios for Power Automate usage

## 18. Extending the Power Platform Common Data Service

This module looks at the tools and resources needed for extending the Power Platform. We'll start with looking at the SDKs, the extensibility model, and event framework. This learning path also covers when to use plug-ins. Configuration of plug-ins as well as registering and deploying plug-ins.

## 19. Security Modeling

Solution Architect's role in security modeling  
Discovery and learning your client's environment  
Controlling access to environments and resources  
Controlling access to CDS Data  
Group Exercise - Security Modeling

## 20. Integrate with Power Platform and Common Data Service

This module describes how to integrate with Common Data Service using code by learning about Common Data Service API. Get an in-depth overview of options available with Common Data Service to integrate data and events to Azure.

## 21. Extend Power Apps portals

This module describes how to transform a content portal into a full web app interacting with Common Data Service. We will also cover the options available to customizers and developers to extend the portal functionality and integrate with Office 365, Power Platform, and Azure components.

## 22. Integration

Solution Architects role in Integrations  
What is an integration and why do we need it  
Platform features that enable integration  
CDS Event Publishing  
Scenarios for group discussion

## 23. Dynamics 365 Applications Architecture

Solution Architect's role when deploying Dynamics 365 apps  
Architecture Considerations for primary apps  
Group Exercise - App specific working groups evaluate requirements

## 24. Power Virtual Agents architecture

Introduction  
Chatbot options  
Chatbot concepts  
Best practices  
Integrate chatbots  
Power Virtual Agents in Microsoft Teams

## 25. Robotic Process Automation

- Introduction
- Power Automate Desktop
- Recording and editing tasks
- Running desktop flows
- Process advisor

## 26. Testing and Go Live

- Solution Architect's role with testing and go live
- Planning for testing
- Planning for go live

## Audience

Candidates for this course design, develop, secure, and troubleshoot Power Platform solutions. Candidates implement components of a solution that include application enhancements, custom user experience, system integrations, data conversions, custom process automation, and custom visualizations. Candidates will gain applied knowledge of Power Platform services, including in-depth understanding of capabilities, boundaries, and constraints.

## Prerequisites

Students should have an introductory knowledge of Power Platform. Students should have development experience that includes JavaScript, JSON, TypeScript, C#, HTML, .NET, Microsoft Azure, Microsoft 365, RESTful Web Services, ASP.NET, and Power BI.