Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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PL-400T00: Microsoft Power Platform Developer

CODE:	LENGTH:	PRICE:
MCS_PL-400T00	40 Hours (5 days)	kr43,000.00

Description

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.

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. Candidates should have development experience that includes JavaScript, JSON, TypeScript, C#, HTML, .NET, Microsoft Azure, Microsoft 365, RESTful Web Services, ASP.NET, and Power BI.

Prerequisites

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

Programme

Modules
1. How to build your first model-driven app with Dataverse
Do you want to quickly build apps with little to no code? This module focuses on the building blocks of Dataverse and model-driven apps. These key components will help you build quick business apps in your organization.
Learning objectives
In this module, you will:
Discover the value and key features of Dataverse.
Learn about the value and key features of model-driven apps.
Explore sample model-driven template apps.
2. Get started with model-driven apps in Power Apps
Model-driven app design is an approach that focuses on quickly adding components to your apps. These components include dashboards, forms, views, and charts. With little or no code, you can make apps that are simple or complex.
Ten moduł pomaga w przygotowaniu się do egzaminu Exam PL-100: Microsoft Power Platform App Maker.
Learning objectives
In this module, you will:
Learn about model-driven app design
Create a model-driven app
3. Manage tables in Dataverse
Dataverse tables are similar to tables in a database. Every instance of a Dataverse database includes a base set of tables that provide structure for data that is commonly used by business applications.
Learning objectives
In this module, you'll learn about:
Tables in Dataverse.
Types of tables that are available in Dataverse.
Creating a custom table.
Enabling attachments within a table.
Which licensing requirements to apply to use each type of table.
4. Create and manage columns within a table in Dataverse

Do you want to create new data columns or use existing standardized columns for your business solutions? This module will show you how to manage or create new columns within a table in Dataverse.
Ten moduł pomaga w przygotowaniu się do egzaminu Exam PL-100: Microsoft Power Platform App Maker.
Learning objectives
In this module, you will:
Learn what a column is in Dataverse.
Learn about the types of columns that are available in Dataverse.
Add a column to a table.
Learn what a primary name column is in Dataverse.
Identify restrictions that are associated with columns.
Create an auto-numbering column.
Create an alternate key.
5. Working with choices in Dataverse
Do you want to create standardized choice lists that you can use across all of your Power Apps? This module will show you how to create new or use standard choice lists called choices in Dataverse.
Learning objectives
In this module, you will:
Learn about choices.
Explore the standard choices.
Create a new choice or modify an existing one.
6. Create a relationship between tables in Dataverse
Do you need to create relationships between tables? This module will show how and why you can separate data into tables and how to relate between tables to build complex and robust business solutions. It will also explain the different kinds of relationships that you can define between tables in Dataverse.
Learning objectives
In this module, you'll learn:
Why you should segment data that is used by your solutions into many tables.
Why you need to relate one table to another.
How to build relationships between tables.
How to select the proper relationship type when you're building solutions with Dataverse.
7. Define and create business rules in Dataverse
The ability to build business rules that ensure consistent business logic whatever app is accessing that data set is imperative to a successful business operation. This module will show you how you can build business rules that are triggered anytime they're used within Dataverse.
Learning objectives
In this module, you'll learn how to:
Define business rules in Dataverse.
Create and manage business rules in Dataverse.
8. Create and define calculation or rollup columns in Dataverse
Do you want to use rollup or calculation columns? This module shows you how to build calculations or rollups that are defined and triggered within the data in Dataverse, regardless of the app that accesses that data set.
Learning objectives
In this module, you'll learn how to:
Define a rollup column.
Create a rollup column.
Identify a calculation column.
Create a calculation column.
9. Get started with security roles in Dataverse
Do you want to use security roles to limit user permissions? This module will show you how you can set permissions to limit access to an environment. Or limit which users can view, edit, or delete data in an environment within Dataverse.
Ten moduł pomaga w przygotowaniu się do egzaminu Exam PL-100: Microsoft Power Platform App Maker.
Learning objectives
In this module, you will:
Learn about security roles and apply them to users in an environment.
Learn how to add users to an environment.
Understand security concepts in Dataverse
Identify default security roles.
Create a custom role.
Create a custom security role and assign it to entities and users.
Learn how to configure Dataverse teams for security
Learn how to configure Dataverse group teams for security
10. Get started with Power Apps canvas apps
Learn the basics of Power Apps and how you can use it in your organization.
Learning objectives
In this module, you will:
Explore how Power Apps can make your business more efficient.
Learn how to use different technologies to perform different tasks in Power Apps.
Learn about the different ways to build an app in Power Apps.
Create your first app from data in an Excel workbook.

11. Customize a canvas app in Power Apps
Learn how to customize an app by adding controls, images, and logic.
Learning objectives
In this module, you will:
Change the layout of a gallery.
Change the data that a control shows.
Change the order in which fields appear.
Change the control with which a user provides information.
Explore controls on each screen of an app.
Format a number as a price.
Color prices based on their values.
Explore formulas in a generated app.
12. Manage apps in Power Apps
Manage app versions, app sharing, and environments in Power Apps.
Learning objectives
In this module, you will:
Learn how to view and restore app versions.
Explore how to share an app, including permissions and notifications.
Learn about what environments are, how to create them, and how to manage security.
Find more information about Power Apps.
13. Navigation in a canvas app in Power Apps
App users can only navigate through the navigation options provided by an app developer, and this module is designed to help you build a good navigation experience for your canvas app.
Ten moduł pomaga w przygotowaniu się do egzaminu Exam PL-100: Microsoft Power Platform App Maker.
Learning objectives
In this module, you will:
Understand how navigation works in a canvas app
Use the Navigate and Back functions
Understand the different ways these functions can be invoked
14. How to build the UI in a canvas app in Power Apps
Do you want to build a better UI for app users? This module helps you do that using themes, icons, images, personalization, different form factors, and controls.
Ten moduł pomaga w przygotowaniu się do egzaminu Exam PL-100: Microsoft Power Platform App Maker.
Learning objectives
In this module, you will:
Understand the basics of building the UI through themes, icons, control customization, and images.
Use personalization in a canvas app
Understand the differences between the Tablet and Mobile form factors
15. Use and understand Controls in a canvas app in Power Apps
Controls help create a better experience for the user and collect the appropriate data. This module will help you understand and use Controls.
Ten moduł pomaga w przygotowaniu się do egzaminu Exam PL-100: Microsoft Power Platform App Maker.
Learning objectives
In this module, you will:
Understand how to use controls in a canvas app
Use the different types of controls
Understand how Galleries and Forms related to controls
16. Document and test your Power Apps application
In this module, you'll learn best practices around testing and documenting your Power Apps application.
Ten moduł pomaga w przygotowaniu się do egzaminu Exam PL-100: Microsoft Power Platform App Maker.
Learning objectives
In this module, you will:
Learn about the different types of test plans and components of a good test plan
Identify and discuss optimization tools and performance tuning
Learn about the benefits of documenting your application
17. Use imperative development techniques for canvas apps in Power Apps
Imperative development techniques can help you achieve the goal for your app. You will learn about different development methods and different variables in Power Apps.
Learning objectives
In this module, you will:
Understand imperative vs. declarative development
Understand the variables in Power Apps
Understand when to utilize each of the three different types of variables
18. Create formulas that use tables, records, and collections in a canvas app in Power Apps
Do you have need for complex formulas in your app? This module can help you write those formulas.
Learning objectives
In this module, you will:
Utilize formulas that process multiple records
Use the Concat function to combine text from multiple records

Utilize the Countrows, CountIf, ForAll
Perform math operations on data in a table
19. Perform custom updates in a Power Apps canvas app
With some Power Apps canvas apps a form is not the solution. This module will focus on how to perform custom updates when your data is not in a form.
Learning objectives
In this module, you will:
Use the Patch function to update your data
Understand how the Defaults function is used to create new records with Patch
Utilize the Remove and RemoveIf functions to delete records
Determine whether to use Clear and Collect or ClearCollect in their scenario
20. Complete testing and performance checks in a Power Apps canvas app
Do you want to test your app and improve it's performance? This module will help you understand how to test an app and improve performance.
Learning objectives
In this module, you will:
Use best practices to improve the performance of your app
Understand how to best test an app
Use fiddler for troubleshooting
21. Work with relational data in a Power Apps canvas app
Do you want to improve a user's experience in your canvas app? This module will show you how to work with relational data to provide a good experience for app users.
Learning objectives
In this module, you will:
Understand relational data
Use relational data to improve an app user's experience in Power Apps
Understand how to use relational data in Microsoft Dataverse
22. Work with data source limits (delegation limits) in a Power Apps canvas app
It's important to learn how to work with data source limits. You need to understand the various limits and variables that go into those limits to best work with data in Power Apps. This will help you chose the best data source for an app to meet your requirements.
Learning objectives
In this module, you will:
Understand the different limits of different data sources
Understand how functions, predicates, and operators all play roles in the limits
Use this new understanding to choose the best data source for an app
23. Connect to other data in a Power Apps canvas app
Do you need to connect to data that isn't tabular? This module will help with that. It includes discussion of action-based connectors, Flow, and user data.
Learning objectives
In this module, you'll:
Understand and use action-based connectors
Integrate user information and user-profile information into a canvas app
Use Power Automate with Power Apps
24. Use custom connectors in a Power Apps canvas app
Custom connectors can be used with your canvas app when a built-in connector is not available. This module focuses on using custom connectors.
Learning objectives
In this module, you will:
Understand custom connectors and the basics of how to build one
Understand the custom connector lifecycle
Use postman with a custom connector
25. Get started with Power Automate
Power Automate is an online workflow service that automates actions across the most common apps and services.
Ten moduł pomaga w przygotowaniu się do egzaminu Exam PL-100: Microsoft Power Platform App Maker.
Learning objectives
In this module, you will:
Create a flow that automatically saves email attachments
Learn how to create a button flow to send yourself a reminder
26. Build approval flows with Power Automate
Power Automate is an online workflow service that automates actions across the most common apps and services. In this module, you'll build approval flows to streamline your business, save time, and work more efficiently.
Learning objectives
In this module, you will:
Create and process approval requests
Build a flow that runs at recurring time intervals
Create a business process flow with conditions
27. Introduction to expressions in Power Automate
Get the most out of your data using functions to create expressions.
Learning objectives

In this module, you will:
Use one or more functions to create expressions.
Use functions to retrieve data, change data, evaluate data, and more.
28. Introduction to Microsoft Power Platform developer resources
The goal of this module is to give a broad-scoped overview of the developer experience as it relates to Microsoft Power Platform. It will cover a high-level introduction how the ecosystem is represented, with the intended audience being a software developer with limited experience in working with Microsoft Power Platform.
Learning objectives
In this module you'll be able to:
Explain what solution components exist within Microsoft Power Platform.
Explain key components of Microsoft Dataverse and the Common Data Model.
Explain what Azure solution elements relate to Microsoft Power Platform.
Explain what AI Solutions exist as it relates to Microsoft Power Platform.
Navigate the Developer Guide successfully in support of their Microsoft Power Platform development efforts.
29. Use developer tools to extend Microsoft Power Platform
This module will focus on the available developer tools that can help you perform development activities with Microsoft Power Platform.
Learning objectives
In this module, you will:
Install NuGet packages available for Microsoft Power Platform development
Work with the Configuration Migration tool
Work with Package Deployer
Leverage Solution Packager to isolate features
Run the Plugin Registration Tool
30. Introduction to extending Microsoft Power Platform
This module will focus on the underlying solution architecture from a technical perspective and what extensibility options exist. It will also cover the ever-important element of Microsoft Power Platform development, which is the decision-making process of determining when to use configuration versus code.
Learning objectives
In this module, you will:
Identify which elements architecturally comprise Microsoft Power Platform.
Learn about the areas of extensibility that are available to customize Microsoft Power Platform through code.
Discover different approaches to common business scenarios in respect to achieving extensibility by means of configuration versus code.
31. Introduction to Dataverse for developers
The goal of this module is to give an introductory overview of Microsoft Power Platform SDKs that are available from Microsoft via NuGet.
Learning objectives
In this module, you will:
Explain what functions can be executed against Microsoft Power Platform via Microsoft Power Platform SDKs.
Perform basic operations against Microsoft Power Platform such as create/read/update/delete operations.
32. Extend plug-ins
The purpose of this module is to provide an in-depth overview of plug-ins as it relates to Microsoft Power Platform development. This module will review how and when plug-ins are implemented, how they are registered and deployed, and the various configuration options that are available during plug-in registration.
Learning objectives
In this module, you will:
Learn how to extend plug-ins.
33. Performing common actions with client script
The goal of this module is to review how to achieve common user experience automation procedures through Client Script. This module is intended to serve as a practical guide for how to solve real-world scenarios that are frequently encountered during Microsoft Power Platform implementations.
Learning objectives
In this module, you will:
Write client script to perform common actions as listed in the module units.
34. Automate business process flows with client script
This module will focus on educating developers on how to perform common techniques in regard to automating business process flows, along with explaining the context of when these scenarios might be applied.
Learning objectives
In this module, you will:
Automate business process flow actions by using JavaScript/TypeScript API methods.
35. Get started with Power Apps component framework
Learn how to get started with Microsoft Power Apps component framework.
Learning objectives
In this module, you will:
Learn about Power Apps component framework architecture.
Learn about Power Apps component tooling.
36. Build a Power Apps component
Build a custom Power Apps component, create a code component solution package, and then test and debug a code component.

Learning objectives
In this module, you will:
Create a custom Power Apps component.
Create a code component solution package.
Test and debug a code component.
Learn key concepts of Dataverse auditing
37. Use advanced features with Power Apps component framework
Get details on how to address more complex scenarios as it applies to a Power Apps component framework. This module covers how to use client frameworks such as React and Angular within a component, along with how to address scenarios such as file upload, localization, and integration with Microsoft Dataverse Web API.
Learning objectives
In this module, you will:
Use formatting API in a Power Apps component.
Use Dataverse web API in a Power Apps component.
38. Work with Dataverse Web API
Learn about working with the Dataverse Web API.
Learning objectives
In this module, you will:
Interact with Dataverse Web API by using Postman.
Authorize against Dataverse with OAuth.
Use OData to query data.
39. Integrate Dataverse Azure solutions
Gain an in-depth overview of options available within Dataverse to integrate data and events to Azure.
Learning objectives
In this module, you will:
Publish Dataverse events to Microsoft Azure Service Bus.
Write a Service Bus Event Listener that consumes Dataverse events.

Session Dates

På begäran, kontakta oss

Ytterligare information

Denna utbildning finns också som utbildning på plats. Kontakta oss för mer information.