



ADVANCED POWER APPS & POWER AUTOMATE TRAINING ONLINE

Microsoft's Power Apps and Power Automate provide the latest, cutting edge method for creating solutions ranging from simple custom forms to full applications. In this course, you will obtain the skills necessary for implementing Power Apps canvas apps and Power Automate flows in your organization.

Audience: Office 365 & SharePoint power users, InfoPath designers, Access Web App designers, form creators, citizen developers, programmers.

INSTRUCTOR	HOURS OF TRAINING	DURATION
Laura Rogers, Microsoft MVP	Over 20 hours	One year of access to all Power Apps and Power Automate training.

Course Curriculum

Full Power Apps & Power Automate Syllabus

Day 1

Power Apps Module 1: Getting Familiar with Power Apps

In this introductory module, the Power Apps design interface will be demonstrated and explained. This will familiarize you with the basics of navigating the interface and aid in finding the tools necessary to create successful Power Apps. You will learn the differences between canvas apps and model-driven apps, and standalone versus customized list forms. Concepts and terminology will also be discussed to lay the foundation for advanced topics.

Topics: Examples, Possibilities, End user experience, types of Power Apps, app creation

Power Apps Module 2: The Design Surface

The next step for developing Power Apps is the fundamental understanding of the various concepts in the canvas itself. Screens, controls, galleries and associated properties with each, will be taught. The knowledge from this module will allow us to begin shaping the user interface of the PowerApp. You will also learn about error checking and testing methods.

Topics: Tabs, property panel, data panel, rules panel, screen panel, naming conventions for controls, app checker, monitor.

Power Apps Module 3: Functions

Creating controls such as labels, input boxes, or buttons is necessary for user interaction, however, the functions behind these controls is where we are able to add productivity to our business. Functions are the pivotal tool that allows your PowerApps to be brought to life. This module will introduce the fundamental principles of functions and their syntax.

Topics: Formulas, enumerations, functions, logic, signals and named operators, syntax tips.

Power Apps Module 4: Data sources / Connections

In this module, we will begin by discussing the fundamentals of data connections and the avenues available in PowerApps. The foundational concepts of viewing the data within PowerApps will also be discussed, as well as several common types of data connections in Office 365. Specifically, SharePoint, Excel, OneDrive, and Planner. User data, approvals, and email connections are covered in detail and demonstrated. You will learn how to obtain data about the logged in user, such as their email address and Department, and how to send email directly from Power Apps without the need for flow.

Topics: data sources, data connections, and the difference between the two; connecting to data; intro to the Common Data Service, email, user data

Day 2

Power Apps Module 5: Lists and Forms

Now that we have the capability of adding data sources, we will delve into the topics of viewing, filtering, creating, and editing data using galleries, tables, and forms. This module then advances into methods of passing values (aka: parameters) across controls such as cards, buttons, for advanced form logic upon submission. You will learn about form properties and modes, how to submit forms, how to edit or view existing data, and set up form validation.

Topics: Gallery properties, filtering/searching/sorting galleries, gallery templates, tables versus galleries, form properties, advanced functionality of cards, connecting galleries to forms, and form functions.

Power Apps Module 6: Dynamic Controls and Variables

For an application to deliver increased efficiency to a user, it must possess the ability to dynamically change based on the user's input. This module will discuss the advanced use of variables and logic based functions that allows the creation of an efficient and user friendly application. The concept of PowerApps "Components" will also be taught and demonstrated. You will also learn in detail, how to pass a query string parameter to Power Apps. In this module, we also go into detail about the properties and functionalities of various types of controls, such as text boxes, combo boxes, sliders, and more.

Topics: collections, global variables, context variables, deep dive into controls, advanced functions, and using query string URLs for passing parameters, components

Day 3:

Power Apps Module 7: Advanced SharePoint Functionality

Business requirements for solutions often become fairly complex, and form logic/rules becomes a necessity. This module starts with how to customize SharePoint list forms with PowerApps, then will dive into the depths of understanding SharePoint data as it pertains to PowerApps. This includes lookups, choice fields, people fields, and their advanced usage when implementing automation. Advanced data submission, outside of forms (patching), will be covered in detail. You will learn about repeating tables (parent/child lists) and how to set this up in Power Apps.

Topics: customizing list forms, SharePoint data structure, complex fields, parent-child relationships in forms, and collecting and patching data.

Power Apps Module 8: Curb Appeal

Once we have created the innerworkings of a PowerApp, we are faced with daunting task of visual appeal. This module will present concepts, tips, and tricks around branding your PowerApp. Apps that are professional looking and polished will help to increase user adoption. Learn about color options, menus and navigation inside the app, how to create responsive apps, and even build animations.

Topics: visual properties, color selecting, creating a standard menu across screens, animations, charts, and media controls.

Power Apps Module 9: Publishing

Now that it's ready to go live, how do you deliver it to the intended audience? In this module, you will learn how to share and present Power Apps to end users in your organization. We will discuss publishing options, settings, versioning, and restrictions. Then, we will cover the central administration of PowerApps, such as managing the owner and user roles. The topics of analytics and environments will also be discussed. You will also learn how to publish Power Apps directly to Microsoft Teams.

Topics: App collaboration, sharing with end users, app settings, versioning, analytics, PowerApps admin, and packaging & deploying.

Power Automate Curriculum

Day 4:

Power Automate Module 1: Flow Editing Interface

In this first module, we will go into creating blank Flows and building them from scratch. This includes an overview of the interface and options when building Flows, and concepts such as triggers, actions, conditions, and dynamic content. Flow sharing and collaboration concepts will also be covered, as well as the mobile app.

Power Automate Module 2: Flow Triggers

There are hundreds of available triggers in Microsoft Flow. In this module, you will learn how to use them, and we will deep dive into some specific common and important triggers. Learn about manual triggers and how initiation parameters work. Other triggers such as SharePoint, recurrences, Microsoft Forms, and Outlook will be demonstrated as well.

Power Automate Module 3: Working with SharePoint Data

This module covers the plethora of actions and possibilities when working with SharePoint data in Microsoft Flow. After covering the common concepts such as creating SharePoint list items, you will learn the difference between the Get Item action and Get Items, and how to manipulate and update data across multiple lists. You will learn how to work with SharePoint's content approval settings in Flow, and even how to query one or more SharePoint list items.

Power Automate Module 4: Working with Files

In this module, it's all about working with files in Microsoft Flow. There are many different places that files can come from, or be sent to. They can be email attachments, documents in a library or OneDrive, attachments to a list item, and much more. You will learn how to use Flow to work with file content and file names, and all of the gotchas involved in that process. We will also cover content conversion.

Power Automate Module 5: Approval Processes

In this module, you will learn about your options when it comes to building approval processes. There is a Flow action called Approvals, that has a lot of built in functionality. There are also other ways that you can go about it. Send emails, assign tasks, assign planner tasks, send email with options. These various ways will be discussed, compared, and demonstrated.

Day 5:

Power Automate Module 6: Testing & Troubleshooting

Microsoft Flow has very powerful inherent functionality when it comes to testing and troubleshooting your Flows. In this module, you will learn what your options are, as well as the ways to test different types of Flows. Flow history, errors, and troubleshooting will be demonstrated.

Power Automate Module 7: Conditions, Loops & More

This module is about conditions, loops, and some more common actions. Conditions let you create IF THEN statements and various branches of a workflow. Learn about the new interface for creating complex conditions, and other related concepts, such as switches and parallel branches. With more complex workflows, it is also important to understand looping, and different types of loops, such as apply to each, and do until. In this module, you will also learn about settings that can be configured on each action, and some useful actions such as date time, and schedule.

Power Automate Module 8: Variables & Expressions

When building Flows, it is important to understand how variables are used, and how to build expressions. There are several different types of variables, and there are over twelve different actions relating to variables and other data operations. In this module, we discuss and demonstrate these, as well as how to work with arrays (lists of things) in Flows. The expression builder is also covered, with examples of how it is used, and what the possibilities are.

Power Automate Module 9: Flow with PowerApps

There are several different integration points between Microsoft Flow and PowerApps. In this module, learn about the functionality regarding PowerApps triggers and actions in Flow. PowerApps can send data to Flow, and Flow can also talk back. We will discuss and demonstrate these concepts and scenarios in which they are the most useful.

Power Automate Module 10: Flow Administration

In this last module, learn about Environments in the Power Platform, and how to do administration of Flows and PowerApps in your organization. Reporting and admin alerts are covered, as well as special Flow actions relating to the admin of these systems.

What is included in this course:



Over 12 hours of training content

Class lab files to work through



Access to this course online for one year

Quizzes along the way



A completion certificate