

Bootcamp Training in Microsoft **Power Automate** Cloud and Microsoft **Power Apps** Integration

Target Audience

This bootcamp is designed for business professionals, IT administrators, citizen developers, automation specialists, and solution architects who want to gain hands-on experience integrating Microsoft Power Automate Cloud with Microsoft Power Apps. It is ideal for those looking to build custom business applications, automate workflows, and streamline processes without extensive coding knowledge.

Course Objective

The objective of this bootcamp is to provide participants with practical skills in integrating Microsoft Power Automate Cloud with Microsoft Power Apps to develop dynamic, automated business solutions. Participants will learn how to create interactive apps, automate data processes, and enhance productivity by leveraging the power of both platforms.

Course Outcome

- **Develop and integrate custom Power Apps solutions** with Power Automate Cloud to automate business processes and improve efficiency.
- **Configure and manage automated workflows** that interact with Power Apps, SharePoint, Dataverse, and other Microsoft 365 services.
- **Implement advanced automation techniques** such as approval workflows, AI Builder integration, and error handling to create robust, scalable applications.

Course Outline

The course comprises **40-hours** of theory and labs and is divided into **10** different chapters. Each chapter will be followed by **hands-on lab exercises** to reinforce learning and gauge understanding of the topics covered.



Module 1. Introduction to the Power Automate

- Understanding Microsoft Power Automate
- The synergy of Power Automate and Power Apps in the Power Platform
- Real-world applications and benefits of integrating Power Automate and Power Apps
- Setting Up Your Environment
- Creating a Power Automate environment
- Configuring a Power Apps environment

Module 2. Exploring Power Automate Basics

- Getting Started with Power Automate
- Understanding the basic components of a flow
- Navigating the Power Automate user interface
- Creating your first automated flow from scratch
- Triggering Flows
- Understanding triggers and trigger types
- Configuring triggers for different events (e.g., When an item is created, when a button is clicked)
- Exploring manual and automated triggers
- Working with Actions
- Introduction to actions and action types
- Building actions to perform various tasks (e.g., sending an email, creating a SharePoint item)
- Configuring inputs and outputs for actions

Module 3. Introduction to Power Apps Basics

- Canvas Apps Fundamentals
- Data Connections and Data Sources
- Connecting Power Apps to data sources (e.g., SharePoint, SQL Server, Dataverse)
- Integrating Power Apps with Power Automate for data processing
- Model-Driven Apps Essentials
- Import a solution



Module 4. Integrating Power Automate with Power Apps

- Triggering Flows from Power Apps
- Building an on-demand flow trigger using buttons and icons
- Using Power Automate in response to specific user actions
- Passing data between Power Automate and Power Apps parameters
- Power Apps Controls for Flows
- Incorporating Power Automate flows directly into Power Apps using the Flow control
- Utilizing the Start a flow action to trigger flows from within apps
- Controlling flow execution with wait conditions and delays

Module 5. Building Complex Flows integration with Apps

- Composite Flows
- Creating complex flows by combining multiple flows into a single flow
- Understanding scope, input, and output for composite flows
- Passing data between composite flows and child flows

Module 6. Automating Data Entry and Updates

Designing Data Entry Forms

Creating data entry forms using the Power Apps Forms control

Customizing form behaviour with validation rules and error handling

Implementing cascading dropdowns and dependent fields

Automating Data Entry with Power Automate

Building a flow to automate data entry and validation

Integrating AI Builder for automated data extraction and classification

Using scheduled flows for periodic data updates

Creating Data Update Flows

Designing data update flows for record updates and deletions

Using Power Automate flow buttons to initiate data updates

Implementing security measures for sensitive data updates

Module 7. Enhancing Power Automate Skills

Implementing complex conditions and branching in flows

Utilizing expressions and functions for advanced flow logic



Looping and iterating through data with Apply to Each and Do Until
Introduction to custom connectors and their benefits
Creating and using custom connectors in flows
Integrating with APIs and web services using custom connectors
Advanced Flow Concepts
Using expressions and functions for advanced flow logic
Implementing conditions and loops in flows
Utilizing variables to store and manipulate data within flows

Module 8. Building Basic Approval Workflows

- Introduction to Approval Processes
- Understanding the Approval action in Power Automate
- Configuring approval steps and participant settings
- Using the Approval Status column in SharePoint or Dataverse for approvals
- Creating a Leave Request Approval Flow
- Designing a leave request form in Power Apps
- Building an approval flow for leave requests with email notifications
- Handling approval responses within Power Apps

Module 9. Power Automate Desktop

- Introduction to Power Automate Desktop for desktop automation.
- Automating web and desktop applications with UI automation.
- Creating flows to streamline repetitive tasks.
- Create an Integration Flow for Power Apps- Power Automate Cloud-Power Automate Desktop

Module 10. Error Handling and Troubleshooting

- Understanding Common Flow Errors
- Identifying and troubleshooting common errors in Power Automate
- Handling errors with the Scope and Terminate actions.
- Implementing error notification and logging mechanisms
- Debugging Flows and Apps
- Using the Run History and Flow Checker for flow debugging
- Leveraging the Monitor tool for detailed flow analysis