

PowerApps

Module 1: Power Platform Overview & Environment Setup

- **Introduction to Power Platform** and its services
- **Managing Environments** for different use cases (Dev, Test, Prod)
- **Solutions:** Organizing and deploying apps and components
- **Licensing Options and Costs:** Understanding different plans and their limitations

Module 2: Core PowerApps Concepts (Intermediate to Advanced)

- **Advanced Actions and Navigation:** Using collections and variables in complex scenarios
- **Working with Variables:** Understanding scope, collections, and local variables
- **Functions:** Using PowerApps functions for dynamic content, filtering, and transformations
- **Connecting Data:** Connecting to multiple data sources (SharePoint, Dataverse, APIs)
- **Handling Data Tables:** Working with large datasets, sorting, and filtering
- **Galleries & Advanced Controls:** Implementing dynamic galleries with user interactions
- **Form Customizations:** Advanced form logic using Patch, SubmitForm, and Form Validations

Module 3: PowerApps Project - Real-World Application

- **Accessing and Manipulating SharePoint Data**
- **Advanced Conditional Formatting:** Implementing business logic for dynamic user interfaces
- **Using Forms:** Creating and configuring View, Edit, and Add Forms with validations
- **Handling Multiple Data Inputs:** Using sliders, data cards, checkboxes, etc.
- **Complex Search & Filtering:** Optimizing search for large datasets using delegation
- **Working with Modal Popups:** Implementing complex logic for popups and user interactions

Module 4: PowerApps Integration with Microsoft Services

- **Embedding PowerApps** in Microsoft Teams and SharePoint Online
- **Triggering Power Automate Flows from PowerApps**
- **Data Integration:** Using custom connectors to fetch data from external services and APIs

Module 5: Model-Driven Apps & Dataverse

- **What is a Model-Driven App?** Key differences and use cases for model-driven apps
- **Understanding Dataverse:** Using Dataverse as a database for your apps
- **Create Tables, Columns, and Relationships** in Dataverse
- **Form and View Configurations:** Advanced customization in model-driven apps
- **Canvas vs Model-Driven:** Choosing the right app type for business needs

Module 6: PowerApps Administration & Performance Optimization

- **Monitoring PowerApps Usage:** Admin Center for app monitoring and troubleshooting
- **App Deployment:** Moving apps from testing to production environments
- **Advanced App Performance:** Implementing optimization techniques for large-scale apps
- **Security & User Management:** Preventing unauthorized users and managing roles in PowerApps

Module 7: Advanced PowerApps Concepts

- **Delegation for Large Datasets:** Handling delegation limits for data sources (SharePoint)
- **Building Responsive Apps:** Optimizing apps for various screen sizes and devices
- **Advanced Patch vs SubmitForm:** When to use each method for different use cases (local vs server-side updates)
- **Debugging and Error Handling:** Best practices for handling errors in PowerApps
- **Creating Custom Connectors:** Building custom connectors to integrate external APIs into PowerApps

Power Automate Cloud

Module 1: Introduction to Power Automate

- **Introduction to Power Automate:** Overview of key features and use cases
- **How to access Power Automate environment**
- **Overview of Flows:** Automated, Instant, and Scheduled Flows
- **Licensing & Pricing for Power Automate**

Module 2: Core Concepts in Power Automate

- **Flows and Types of Flows:** Deep dive into Automated, Instant, and Scheduled Flows
- **Dynamic Content & Expressions:** Using dynamic content to create complex workflows
- **Conditions & Loops:** Implementing logic, approvals, and parallel branches
- **Approvals:** Configuring approval workflows and integrating with PowerApps

Module 3: Working with Data and External Services

- **Connect Power Automate to SharePoint, and Other Data Sources**
- **HTTP Requests to External Services:** Calling REST APIs and processing responses
- **Batch Updates & Multiresponse Approvals:** Handling batch operations and complex approval workflows

- **Data Manipulations:** Filtering, sorting, and aggregating data across sources
- **Triggering Flows from PowerApps:** How to pass data and trigger flows seamlessly

Module 4: Power Automate & Azure Integration

- **Using Azure Functions in Power Automate:** Automating cloud-based business logic through Azure Functions
- **Azure Logic Apps:** Integrating with Azure Logic Apps to extend automation
- **Connecting to Azure API Management:** Using APIs in Power Automate securely

Module 5: Power Automate Administration & Maintenance

- **Monitoring Power Automate Flows**
- **Exporting and Importing Flows:** Transferring flows between environments
- **Flow Analytics and Optimization:** Using built-in analytics to optimize workflows
- **Managing Permissions and Sharing Flows:** Collaborating and sharing flows with teams

Module 6: Advanced Topics in Power Automate

- **Complex Error Handling:** Handling errors in multi-step workflows
- **Performance Tuning:** Improving flow performance with best practices
- **Working with Power Automate Desktop:** Automating desktop tasks with Power Automate Desktop
- **Power Automate & PowerApps Integration:** Sharing data between PowerApps and Power Automate seamlessly

Power Pages

Module 1: Introduction to Power Pages

- What is Power Pages?
- Real-world use cases (customer portals, support sites, etc.)
- How it fits into the Power Platform

Module 2: Portal Core Concepts

- Pages, Forms, Lists — key components
- Using portal templates to save time
- Dataverse basics for Power Pages (simple view)
- User authentication overview (login/signup concept)

Module 3: Building Your First Portal

- Create a portal using Design Studio
- Add and customize pages (logo, text, colors)
- Add basic forms and lists
- Publish and preview the live portal