MICROSOFT CERTIFIED: POWER AUTOMATE RPA DEVELOPER ASSOCIATE

COURSE OVERVIEW

Candidates for this course automate time-consuming and repetitive tasks by using Microsoft Power Automate. They review solution requirements, create process documentation, and design, develop, troubleshoot, and evaluate solutions. Candidates work with business stakeholders to improve and automate business workflows. They collaborate with administrators to deploy solutions to production environments, and they support solutions.
This course equips professionals to design, build, and manage intelligent automation solutions using Microsoft Power Automate, transforming repetitive tasks into efficient, error-free workflows that create measurable business value. Participants learn to assess requirements, document processes, and develop both cloud and desktop flows, integrating with Microsoft services, third-party apps, and APIs. It covers process mining, robotic process automation (RPA), custom connectors, and error handling to ensure scalable, reliable solutions. By the end, participants can identify automation opportunities, align them with business goals, and collaborate effectively to implement solutions that enhance productivity, reduce costs, and support strategic objectives.

TARGET COMPETENCIES

- Process automation
- Workflow optimization
- Solution development
- Data integration
- Error handling
- Process analysis
- System integration

TARGET AUDIENCE

Designed for automation developers, business analysts, RPA specialists, IT consultants, and workflow managers seeking to streamline processes using Microsoft Power Automate. Ideal for professionals who design, deploy, and optimize automated solutions to enhance business efficiency.

COURSE OBJECTIVES

By the end of this course, participants will be able to:

- Design automated workflows using Power Automate.
- Build cloud and desktop automation solutions.
- Integrate automation with Microsoft and third-party apps.
- Apply process mining to identify improvement areas.
- Implement robotic process automation (RPA) effectively.
- Troubleshoot and optimize automation performance.
- Collaborate with stakeholders to deploy solutions.

PRE-REQUISITES

ideal candidate should have experience with:

- The Windows desktop environment.
- Scripting languages such as VBScript and JavaScript.
- NET Framework for use in custom actions.
- Microsoft Dataverse.

NOTE

This course is aligned with the Microsoft PL-500 certification and covers all applied skills that candidates will be tested on in the exam.

COURSE METHODOLOGY

This course is delivered through a blend of interactive lectures, hands-on labs, guided demonstrations, and real-world case studies to ensure practical skill development. Participants will engage in step-by-step exercises to build and optimize automation workflows, apply learned concepts to business scenarios, and collaborate in group discussions to share insights.

COURSE OUTLINE

POWER PLATFORM ROBOTIC PROCESS AUTOMATION OVERVIEW

- Introduction to Microsoft Power Platform for developers.
- Overview of Dataverse and the Common Data Model.
- Extending Power Platform with Azure.
- Power Platform environments.

MANAGE SOLUTIONS IN POWER APPS AND POWER AUTOMATE

- Add and remove apps, flows, and entities in a solution.
- Edit a solution-aware app, flow, and table.
- Import and export solutions.
- Build and deploy a complex solution with flows, apps, and entities.
- Automate solution management.

INTRODUCTION TO POWER AUTOMATE PROCESS MINING

- Process mining concepts and its role in hyperautomation10 min.
- Use process mining.
- Process mining in Power Automate.
- Process mining in Power Automate web portal.
- Power Automate Process Mining desktop app.

OPTIMIZE YOUR BUSINESS PROCESS WITH PROCESS ADVISOR

- Get familiar with process advisor.
- Create your first recording.
- Edit recordings and group actions.
- Analyze recordings and interpret results.
- Automation recommendations.

BUILD AND OPTIMIZE CLOUD FLOWS IN POWER AUTOMATE

- Get started with Power Automate.
  - Introducing Power Automate.
  - Create your first flow.
  - Create recurring flows.
  - Monitor incoming emails.
  - Share flows.
- Introduction to expressions in Power Automate.
  - Introduction to expressions.
  - Get started with expressions.
  - Notes make things easier.
  - Types of functions.
  - Write complex expressions.
  - Creating a manual flow and using expressions.
- Best practices for error handling in Power Automate flows.
  - Introduction to error handling.
  - Configure run after option.
  - Power Automate analytics.
- Overview of HTTP connectors in Power Automate.
  - HTTP Webhook built-in connector.
  - HTTP with Microsoft Entra ID connector.
  - When an HTTP request is received built-in connector.
- Troubleshoot slow-running flows in Power Automate.
  - Use the Compose and Variable actions to view data.
  - Power Automate analytics.
  - Microsoft Power Platform admin center.
  - Redesign your flow.

DESKTOP FLOWS AND ROBOTIC PROCESS AUTOMATION IN POWER AUTOMATE

- Build your first Power Automate for desktop flow.
  - Set up the environment.
  - Explore Power Automate for desktop.
  - Create your first Power Automate for desktop flow.
  - Record Power Automate for desktop actions.
  - Edit and test recorded actions.

COURSE OUTLINE

- Configure flow control in Power Automate for desktop.
  - Introduction.
  - Flow control actions.
  - Practical exercise on Flow control actions.

- Adjust process behavior using conditional actions with Power Automate for desktop.
  - Introduction to conditional actions.
  - Conditional actions.
  - The If group of actions.
  - If group of actions.
  - The Switch group of actions.

- Handle variables in Power Automate for desktop.
  - Introducing variables.
  - Create, edit, and use variables.
  - Variable data types.
  - Advanced data types.
  - Input and output variables.
  - Variable manipulation.
  - Sensitive variables.

- Define input and output parameters in Power Automate.
  - Set up in Power Automate.
  - Define an input variable.
  - Set input variables.
  - Define output variables.
  - Add UI elements and test.

- Automate repetitive tasks using loops in Power Automate for desktop.
  - Introduction to loops.
  - Loop actions.
  - Simple loop actions.
  - For each loop actions.
  - Loop condition actions.

- Generate Power Automate for desktop flows by recording.
  - Introduction to the Power Automate for desktop recorder.
  - Create desktop flows using the recorder.
  - Use the recorder to automate web applications.
  - Use the recorder to automate desktop applications.

- Scripting in Power Automate for desktop.
  - Introduction to scripting.
  - Scripting actions.
  - Calculate modulo with VBScript.
  - Use JavaScript to find the last day of the current month.

- Web automation in Power Automate for desktop.
  - Introducing web automation.
  - Launch, close, and handle browsers.
  - Handle web pages and forms.
  - Extract data from web pages.
  - Direct web access and scripting.
  - Extract stocks from MSN.

- Connect a cloud flow to desktop flows in Power Automate for desktop.
  - Setup process in Power Automate for desktop.
  - Create a new cloud flow.
  - Connect your cloud and desktop flows.
  - Test your new connection.

- Share a cloud flow with Power Automate.
  - Share by using co-ownership.
  - Share by using the run-only option.
  - Use the Send a copy feature.
  - Send a copy.
  - Solutions and sharing.

- Get started with custom connectors for Microsoft Power Platform.
  - Demo of the maker portal experience.
  - Explore custom connector configuration options.
  - Create a new connector in a solution.
  - Use a custom connector.
  - Use a connector from Power Automate.

- Discover and use Web APIs with Power Apps.
  - What are custom connectors.
  - Create a custom connector from Visual Studio.
  - Create a custom connector from Azure API Management.
  - What is OpenAPI and why you should use it.
  - Create a custom connector from an OpenAPI document.
  - Test the custom connector.
  - Use the custom connector in Power Apps canvas app.

- Configure custom connectors with authenticated APIs in Microsoft Power Platform.
  - Authentication options.
  - Use APIs with Azure AD.
  - Configure Microsoft Entra ID authentication.
  - Use graph API from a custom connector.
  - Share and move between environments.

- Configure policy templates for custom connectors in Microsoft Power Platform.
  - Use expressions to access runtime values.
  - Use policies for data conversion.
  - Configure host URL and routing.
  - Add or update values.
  - Use a policy template to dynamically set the host URL.

- Create Microsoft Power Platform OpenAPI custom connectors.
  - Use OpenAPI extensions.
  - Use the dynamic list of values extension.
  - Use dynamic schema.
  - Use OpenAPI extensions.