COURSE OVERVIEW:

In this course, you will learn about, and apply, the various Products and best practices that are in line with business and technical requirements for business solutions, data visualizations, automated workflows, and chatbots. You will also learn about the features like Microsoft Dataverse, AI Builder, Connectors of Power Platform, including how to share, distribute, and appropriately secure them.

PREREQUISITES:

This Course is for freshers and IT Professionals who to create custom business solutions, data visualizations, automated workflows and chatbots using Power Platform.

Applicable careers include

- Power Apps Application Developer
- Power Automate Developer
- Data Analyst
- Business Analyst

CERTIFICATION

1. Exam PL-100: Microsoft Power Platform App Maker
2. Exam PL-200: Microsoft Power Platform Functional Consultant
3. Exam PL-400: Microsoft Power Platform Developer
4. Exam DA-100: Analyzing Data with Microsoft Power BI
5. Exam PL-600: Microsoft Power Platform Solution Architect (Beta)

Power Platform Syllabus

Introduction to Power Platform

- Identify Products in Power Platform
- Identify Features in Power Platform
- Why learn Power Platform?

Introduction to Power Apps

- Types of Apps
- Tour of Power Apps Portal

Create canvas apps

- create canvas apps within a solution
- connect to data sources in canvas apps
- build canvas apps screens

- configure apps for offline access
- use formulas
- use collections and variables
- describe the implications of design choices on app performance
- interpret App Checker results

Create and Use Controls

- add canvas app assets and components to screens
- build canvas app components

Manage versions of canvas apps

- create new versions of an app
- restore a previous version of an app
- publish a new version of an app

Create model-driven apps

- create model-driven apps
- create a site map
- create and configure Common Data Service entity forms
- create and configure Common Data Service entity views
- embed model-driven app records in Microsoft Teams channels

Create portal apps

- create a portal app
- expose Common Data ServiceDataverse data
- configure portal web pages, forms, and navigation
- configure portal security including web roles and page access

Manage an existing data model

- assign a type for a table including standard, activity, or virtual
- configure tables ownership
- create new tables or modify existing tables
- determine which type of relationships to implement including 1: N and N: N
- configure table relationship behaviors including cascading rules
- create new relationships or modify existing relationships
- create new columns or modify existing columns
- create alternate keys for tables
- configure table properties
- configure connection roles

Create and manage processes

- define requirements for business rules
- define and implement business rule logic
- define the scope for business rules
- configure and test business rules
- configure a synchronous classic workflow

Configure Dataverse

- configure Relevance Search
- configure auditing

- perform data management tasks
- configure duplicate detection settings
- configure privacy preferences

Configure security settings

- create and manage business units
- create and manage security roles
- create and manage users and teams
- create and manage field column security profiles
- configure hierarchy security
- configure Conditional Access settings

Create flows

- describe types of flows and flow components
- trigger a flow by using Dataverse connectors
- run actions by using the Dataverse connector
- implement logic control
- implement dynamic content and expressions
- interpret and act on Flow Checker results
- activate and deactivate flows
- interpret flow analytic data

Create and manage business process flows

- configure a business process flow
- add business rules, workflows, and action steps to a business process flow
- define stages and steps
- configure parallel branches
- manage the business process flow table for a business process flow

Build desktop flows

- describe types of desktop flows
- identify use cases for desktop flows
- differentiate between attended and unattended desktop flows
- record business process tasks

Implement AI Builder

- determine which AI Builder model type to use
- create an AI Builder model
- prepare source data for use by models
- train, test, and publish a model
- consume a model by using Power Apps
- consume a model by using Power Automate

Create chatbot

- assign a chatbot to an environment
- publish a chatbot
- share a chatbot
- add chatbots to Teams and other channels
- monitor and diagnose bot performance, usage, and topic usage

Configure topics

- define topic conversation triggers
- create questions, messages, and conditions
- extract topics from a web page
- implement greetings, escalations, error messages, and statuses
- call a Power Automate flow to run an action

Configure entities

- create custom entities
- implement entities in conversations
- implement variables to store data

Test apps and flows

- describe the testing process
- implement Power Platform testing tools
- validate accessibility

Application lifecycle management

- Introduction to ALM
- Solutions

Introduction to Data Analytics

- Identify the different roles in the data space
- Identify the tasks that are performed by a Data Analyst
- Describe the Power BI landscape of products and services
- Tour the Power BI Service

Get data from different data sources

- identify and connect to a data source
- change data source settings
- select a shared dataset or create a local dataset
- select a storage mode
- choose an appropriate query type
- identify query performance issues
- use Microsoft Dataverse
- use parameters
- use or create a PBIDS file
- use or create a data flow
- connect to a dataset using the XMLA endpoint

Profile the data

- identify data anomalies
- examine data structures
- interrogate column properties
- interrogate data statistics

Clean, transform, and load the data

- resolve inconsistencies, unexpected or null values, and data quality issues
- apply user-friendly value replacements
- identify and create appropriate keys for joins
- evaluate and transform column data types
- apply data shape transformations to table structures
- combine queries
- apply user-friendly naming conventions to columns and queries
- leverage Advanced Editor to modify Power Query M code
- configure data loading
- resolve data import errors

Design a data model

- define the tables
- configure table and column properties
- define quick measures
- flatten out a parent-child hierarchy
- define role-playing dimensions
- define a relationship's cardinality and cross-filter direction
- design the data model to meet performance requirements
- resolve many-to-many relationships
- create a common date table
- define the appropriate level of data granularity

Develop a data model

- apply cross-filter direction and security filtering
- create calculated tables
- create hierarchies
- create calculated columns
- implement row-level security roles
- set up the Q&A feature

Create measures by using DAX

- use DAX to build complex measures
- use CALCULATE to manipulate filters
- implement Time Intelligence using DAX
- replace numeric columns with measures
- use basic statistical functions to enhance data
- create semi-additive measures

Optimize model performance

- remove unnecessary rows and columns
- identify poorly performing measures, relationships, and visuals
- improve cardinality levels by changing data types
- improve cardinality levels through summarization
- create and manage aggregations

Create reports

- add visualization items to reports
- choose an appropriate visualization type
- format and configure visualizations

- import a custom visual
- configure conditional formatting
- apply slicing and filtering
- add an R or Python visual
- configure the report page
- design and configure for accessibility
- configure automatic page refresh
- create a paginated report

Create dashboards

- set mobile view
- manage tiles on a dashboard
- configure data alerts
- use the Q&A feature
- add a dashboard theme
- pin a live report page to a dashboard

Enrich reports for usability

- configure bookmarks
- create custom tooltips
- edit and configure interactions between visuals
- configure navigation for a report
- apply sorting
- configure Sync Slicers
- use the selection pane
- use drill through and cross filter
- drilldown into data using interactive visuals
- export report data
- design reports for mobile devices

Enhance reports to expose insights

- apply conditional formatting
- apply slicers and filters
- perform top N analysis
- explore statistical summary
- use the Q&A visual
- add a Quick Insights result to a report
- create reference lines by using Analytics pane
- use the Play Axis feature of a visualization
- personalize visuals

Perform advanced analysis

- identify outliers
- conduct Time Series analysis
- use groupings and binnings
- use the Key Influencers to explore dimensional variances
- use the decomposition tree visual to break down a measure
- apply AI Insights

Manage datasets

- configure a dataset scheduled refresh
- configure row-level security group membership
- providing access to datasets
- configure incremental refresh settings
- promote or certify Power BI datasets
- identify downstream dataset dependencies
- configure large dataset format

Create and manage workspaces

- create and configure a workspace
- recommend a development lifecycle strategy
- assign workspace roles
- configure and update a workspace app
- publish, import, or update assets in a workspace
- apply sensitivity labels to workspace content
- use deployment pipelines
- configure subscriptions
- promote or certify Power BI content

Integrate Power BI with Power Apps

- create Power BI visualizations
- create data flows and schedule data flow runs
- filter data
- build reports and dashboards
- publish and share reports and dashboards
- add Power BI tiles to model-driven apps and canvas apps
- add canvas apps to a Power BI dashboard
- trigger Power Automate flows from Power BI alerts

Integrate Power Apps with Microsoft 365

- add apps to Microsoft Teams
- create a Teams app from a Power Apps app
- create an app directly in Teams
- configure app policies
- create a Teams channel by using Power Automate
- configure and use Microsoft Word and Microsoft Excel templates