

# Building Data Solutions Using Azure Synapse

## Module 01 : Serverless SQL pool

- What is serverless SQL pool
- Prepare files for query
- Logical Objects

## Module 02 : Dedicated SQL POOL

- Overview of Dedicated SQL pool
- Fact table
- Dimension Table
- Staging Table
- Table Distribution
- Design a datawarehouse (STAR SCHEMA, SNOWFLAKE SCHEMA)
- Polybase
- Connection with Management Studio
- Connection with Azure Data Studio

## Module 03 : Synapse Pipelines Or ADF

- Overview of Synapse Pipeline or Azure Data Factory
- Explain the data factory process and Components
- Create linked Services
- Create the Datasets
- Create Activities and Pipelines
- Manage Integration Runtime
- Copy Data Tool
- Copy Data from on-prem to the cloud
- Control Flow in Azure Data Factory

## **Module 04 : Apache Spark Pool**

- Configure the Spark Pool
- Creating and associate the notebook
- Reading data from data lake / CosmosDB / Dedicated SQL pool
- Data Transformation Using Apache Spark Pool
- Writing data to data lake / CosmosDB / Dedicated SQL pool

## **Module 05 : Data Analytics with PowerBI**

- What is PowerBI
- PowerBI Overview
- Creating the DataSet
- Creating the report
- Creating the dashboard
- Data Refresh