

Data Transformations Using SPARK

Module 01 : Introduction to SPARK

- Apache Spark overview
- What is Apache Spark
- Spark pool architecture
- Apache Spark in Azure Synapse Analytics
- Apache Spark on Azure Databricks

Module 02 : Introduction to SPARK SQL

- Spark SQL - Introduction
- Features of Spark SQL
- Spark SQL Architecture
- Spark SQL - DataFrames
- SQLContext

Module 03 : Introduction to SPARK PYTHON

- PySpark – Overview
- Who uses PySpark?
- Features of PySpark
- Advantages of PySpark
- PySpark Architecture
- PySpark Modules & Packages
- PySpark Installation
- PySpark DataFrame

Module 04 : Introduction to Modern Data Warehouse

- Overview of Modern Data Warehouse
- Modern Data Warehouse Architecture

- Dataflow in Modern Data Warehouse
- Components of Modern Data Warehouse
- Potential Use Cases

Module 05 : Introduction to DATABRICKS / Apache Spark Pool

- What is Databricks?
- What is Databricks used for?
- Common Use Cases for Databricks
- Spark Pool Overview
- Spark Instances
- Quotas and Resource Constraint

Module 06 : Implementing SPARK with DATABRICKS/Apache Spark Pool

- ETL using Azure Databricks
- ETL using Apache Spark Pool

Module 07 : Reading the Data Using Notebook from diff sources

- Reading data From CSV file
- Reading data From JSON file
- Reading data From Dedicated SQL Pool
- Reading data From CosmosDB

Module 08 : Data Transformation Using Databricks

- Creating and using the Notebook in Databricks
- Creating and using the Notebook in Apache Spark Pool
- Using Python in Databricks Notebook
- Using SparkSQL in Databricks Notebook
- Using Python in Apache Spark Pool Notebook
- Using SparkSQL in Apache Spark Pool Notebook

Module 09 : Writing the Data Using Notebook to different destinations

- Writing Data to File in Azure Data Lake
- Writing Data to CosmosDB
- Writing Data to Dedicated SQL Pool
- Sending Data to ADF

Module 10 : Consuming Data Using BI Tool

- Azure Synapse and PowerBI
- Integration of PowerBI in Azure Synapse
- PowerBI Service
- PowerBI Data Refresh