# Day - 1

• Module 1: Design big data batch processing and interactive solutions
This module explains how to load data into Microsoft Azure for batch processing.

### Lessons

- Module Objectives
- Lesson 1: Ingest data for batch processing
- Lesson 2: Design for batch processing
- Lesson 3: Design interactive queries
- o Review

# Lab: Design big data batch processing and interactive solutions

- o Exercise 1: Load data into Microsoft Azure
- Exercise 2: Prepare data for batch processing
- Exercise 3: Query the data

### After completing this module, students will be able to use PowerShell to:

- Load data into Microsoft Azure
- Prepare data for batch processing
- O Query the data

Module 2: Design Big Data Real-Time Processing Solutions
 This module explains how to load data into Microsoft Azure for real-time processing.

#### Lessons

- Module Objectives
- Lesson 1: Ingest data for Real-Time Processing
- Lesson 2: Designing for Real-Time Processing
- Lesson 3: Design interactive queries for Big Data
- o Review

### **Lab: Design Big Data Real-Time Processing Solutions**

- o Exercise 1: Load data into Microsoft Azure
- o Exercise 2: Prepare data for Real-Time Event Processing
- o Exercise 3: Visualize the Data

# After completing this module, students will be able to use PowerShell to:

- Load data into Microsoft Azure
- o Prepare data for real-time event processing
- Visualize the data

Module 3: Operationalize end-to-end cloud analytics solutions
 This module explains how to Azure Data Factory to centrally manage data from different sources.

#### Lessons

- o Module Objectives
- Lesson 1: Create a data factory
- Lesson 2: Create a data-driven workflow
- Lesson 3: Monitor and Manage the data factory
- Lesson 4: Move, Transform and Analyze Data
- Lesson 5: Design a deployment strategy for an end-to-end solution
- o Review

# Lab: Design big data batch processing and interactive solutions

- o Exercise 1: Create a data factory
- o Exercise 2: Create a data-driven workflow
- Exercise 3: Monitor and Manage the data factory
- o Exercise 4: Move, Transform and Analyze Data
- o Exercise 5: Design a deployment strategy for an end-to-end solution

# After completing this module, students will be able to use PowerShell to:

- Create, Manage & Monitor a data factory
- Create a data driven workflow
- o Move, Transform and Analyze Data
- Create a deployment strategy using PowerShell

 Module 4: PowerShell for Technology Professionals network, application and Azure resources.

### Lessons

- o Introduction
- Compared to Other Scripting Languages
- Configuring and Using PowerShell
- Creating and Running Scripts
- Administering Local Resources
- Administering Network Resources
- Resolve PowerShell Scripting Problems

**Lab**: Operationalize end