

# Domain 4 Lesson Plan

Domain 4 - Analytics Workload [approximately 4 hours of videos, labs, and projects]				
Lesson	Lesson Topic and Subtopics	Objectives	Exercise Labs	Workbook Projects and Files
<b>Pre-Assessment</b> Assessment time - 00:30:00	Analytics Workload: Pre-Assessment			
<b>Lesson 1</b> Video time - 00:013:55 Exercise Lab time - 00:20:00 Workbook time - 00:20:00	<b>Elements of Large-Scale Analytics</b> Data Ingestion and Processing Analytical Data Stores Data Warehousing	4 Describe an Analytics Workload on Azure 4.1 Describe common elements of large-scale analytics 4.1.1 Describe considerations for data ingestion and processing 4.1.2 Describe options for analytical data stores 4.1.3 Describe Azure services for data warehousing, including Azure Synapse Analytics, Azure Databricks, Azure HDInsight, and Azure Data Factory	Create a Resource Deploy a Resource Data Source Ingest Deploy a Pipeline	Data Ingestion and Processing – pg. 32 N/A Analytical Data Stores – pg. 33 N/A
<b>Lesson 2</b> Video time - 00:05:37 Exercise Lab time - 00:15:00 Workbook time - 00:20:00	<b>Real-Time Data Analytics</b> Batch and Streaming Data Real-Time Analytics	4.2 Describe consideration for real-time data analytics 4.2.1 Describe the difference between batch and streaming data 4.2.2 Describe technologies for real-time analytics including Azure Stream Analytics, Azure Synapse Data Explorer, and Spark structured streaming	N/A	Real-Time Data Analytics – pg. 35-36 N/A
<b>Lesson 3</b> Video time - 00:17:00 Exercise Lab time - 00:12:00 Workbook time - 00:30:00	<b>Data Visualization in Microsoft Power BI</b> Capabilities Data Models Visualizations for Data	4.3 Describe data visualization in Microsoft Power BI 4.3.1 Identify capabilities of Power BI 4.3.2 Describe features of data models in Power BI 4.3.3 Identify appropriate visualizations for data	Power BI Visualization Create a Category Hierarchy	Microsoft Power BI – pg. 38 N/A Analytics in Microsoft Power BI – pg. 39 N/A Visualizations in Microsoft Power BI – pg. 40 N/A
<b>Post-Assessment</b> Assessment time - 01:00:00	Analytics Workload: Post-Assessment			