

# Curriculum - Product-Driven Learning with PySpark for Beginners

## Day 1: PySpark Basics & Data Ingestion

- Goals: Understand SparkSession, DataFrames, CSV ingestion
- Tools: PySpark, Google Colab
- Lab: Load sales.csv, explore schema
- Assessment: 5-question quiz on PySpark basics
- Takeaway: Able to load & inspect data

## Day 2: Data Cleaning & Transformation

- Goals: Handle nulls, format columns, validate types
- Tools: dropna(), withColumn(), to\_date()
- Lab: Clean date column, filter bad rows
- Assessment: Fix faulty date formats
- Takeaway: Can prep data for analysis

## Day 3: Aggregation & SQL Reporting

- Goals: Perform groupBy, aggregations, Spark SQL queries
- Tools: groupBy(), agg(), sql(), Parquet
- Lab: Generate 3 insights: monthly sales, top customers, avg discount
- Assessment: Write 2 SQL queries
- Takeaway: Build batch ETL pipeline