# Snowflake and Databricks for Business Analysts and Data Architects

- 2 Days
- Lecture and Hands-on Labs

## Course Overview

This two-day course helps Business Analysts, BI Architects, and migration stakeholders understand how Snowflake and Databricks are used together in modern BI and analytics architectures. Rather than focusing on tools or syntax, the course builds practical mental models for data flow, platform roles, and the decisions that directly affect data correctness, freshness, and trust.

Students are responsible for ensuring all required accounts, software, licenses, and online resources are accessible and functioning prior to class. See the prerequisites section for more details.

## What You'll Learn

- Explain why Snowflake and Databricks are used together in modern BI architectures
- Understand where BI workloads belong and why
- Reason about data correctness, freshness, and trust
- Participate confidently in migration and feature design discussions
- Avoid common analyst-driven failure modes during platform transitions

## Outline

Introduction

- Lecture: Databricks Fundamentals
- Lecture + Lab: Getting Started with Databricks
- 🤔 QUIZ - Intro to Databricks

Why These Platforms Exist

- Lecture + Lab: SQL Foundations for Understanding Data Lineage
- Lecture: Data Lakehouse and Data Intelligence
- Lecture: Databricks Architecture
- Lecture + Lab: Why Modern Data Platforms Exist

Modern Data Flow

- Lecture: AI/BI for Self-Service Analytics
- 🚶 Walk-through - Databricks AI/BI Genie
- Lecture + Lab: Exploring Data with AI/BI Genie
- 🚶 Walk-through - Databricks Dashboards
- Lecture + Lab: Building BI with Databricks Dashboards
- Lecture + Lab: Databricks Alerting
- 🤔 QUIZ - AI/BI Fundamentals within Databricks

Databricks Pipelines

- 🧑‍💻 Walk-through - Lakeflow Spark Declarative Pipelines
- Lecture + Lab: Intro to Databricks Pipelines
- 🧑‍💻 Walk-through - Databricks Workflow
- Lecture + Lab: Creating a Job (Workflow) and a Pipeline

Snowflake

- Lecture + Lab: Getting Started with Snowflake
- Lecture + Lab: Snowflake Horizon Catalog
- Lecture + Lab: AI & ML in Snowflake
- Lecture + Lab: Data Migration Traps in Snowflake

Setting up Unity Catalog on the Lakehouse

- Lecture: Delta, Iceberg, and Interop with Unity
- 🧑‍💻 Walk-through - Creating an AWS Metastore and Unity Catalog

Databricks and Snowflake

- Lecture: Databricks and Snowflake Horizon

Appendix

- 🧑‍💻 Walk-through - Build Your Chatbot Assistant With Databricks AI