



Databricks Engineer Associate

100% Hands-On, Job Oriented Training

Why Learn Databricks

Databricks is recognised as a Leader in the Gartner Magic Quadrant for Data & AI platforms. It has become the go-to Lakehouse platform for modern data engineering, enabling organisations to build, orchestrate, and optimise pipelines at scale. By mastering Databricks, you'll be learning one of the most in-demand skills in today's data landscape.

Databricks Engineer Associate Training Course Highlights

- ✓ Every concept is explained clearly
- ✓ 100% Hands-On
- ✓ Realtime Scenarios
- ✓ Realtime Projects
- ✓ 1:1 Mentorship
- ✓ 1:1 Resume Guidance
- ✓ 100% Job Assistance!

Databricks Engineer Associate Training Technical Highlights

- ✓ Delta Lake
- ✓ Delta LIVE Tables (DLT)
- ✓ Auto Loader
- ✓ Streaming Tables
- ✓ Spark SQL
- ✓ PySpark
- ✓ Databricks one
- ✓ Lake Bridge
- ✓ Realtime Scenarios
- ✓ Realtime Projects
- ✓ Linked-In References, more ..!

Databricks Developer Course Plan:

- 👉 📅 **Module 1: MSSQL**
- 👉 📅 **Module 2: Python (For ETL)**
- 👉 📅 **Module 3: Databricks**
- 👉 📅 **Total Duration: 3 Months**

Who this course is for:

- ✓ Aspiring Data Engineers
- ✓ Aspiring Cloud Engineers
- ✓ Aspiring BI Developers
- ✓ Aspiring Data Science Engineers

Databricks Engineer Associate Training: Detailed Content

Module 1: SQL Server TSQL (MS SQL) Queries

Ch 1: Data Analyst Job Roles

- ✓ Introduction to Data
- ✓ Data Engineer Job Roles
- ✓ Cloud Engineer Job Roles
- ✓ Databricks and Cloud Era

Ch 2: Database Intro & Installations

- ✓ Database Types (OLTP, DWH, ..)
- ✓ DBMS: Basics
- ✓ SQL Server 2025 Installations
- ✓ SSMS Tool Installation
- ✓ Server Connections, Authentications

Ch 3: SQL Basics V1 (Commands)

- ✓ Creating Databases (GUI)
- ✓ Creating Tables, Columns (GUI)
- ✓ SQL Basics (DDL, DML, etc..)
- ✓ Creating Databases, Tables
- ✓ Data Inserts (GUI, SQL)
- ✓ Basic SELECT Queries

Ch 4: SQL Basics V2 (Commands, Operators)

- ✓ DDL: Create, Alter, Drop, Add, modify, etc..
- ✓ DML: Insert, Update, Delete, select into, etc..
- ✓ DQL: Fetch, Insert.. Select, etc..
- ✓ SQL Operations: LIKE, BETWEEN, IN, etc..
- ✓ Special Operators

Ch 5: Data Types

- ✓ Integer Data Types
- ✓ Character, MAX Data Types
- ✓ Decimal & Money Data Types
- ✓ Boolean & Binary Data Types
- ✓ Date and Time Data Types
- ✓ SQL_Variant Type, Variables

Ch 6: Excel Data Imports

- ✓ Data Imports with Excel
- ✓ SQL Native Client
- ✓ Order By: Asc, Desc
- ✓ Order By with WHERE
- ✓ TOP & OFFSET
- ✓ UNION, UNION ALL

Ch 7: Schemas & Batches

- ✓ Schemas: Creation, Usage
- ✓ Schemas & Table Grouping
- ✓ Real-world Banking Database
- ✓ 2 Part, 3 Part & 4 Part Naming
- ✓ Batch Concept & “Go” Command

Ch 8: Constraints, Keys & RDBMS – Level 1

- ✓ Null, Not Null Constraints
- ✓ Unique Key Constraint
- ✓ Primary Key Constraint
- ✓ Foreign Key & References
- ✓ Default Constraint & Usage
- ✓ DB Diagrams & ER Models

Ch 9: Normal Forms & RDBMS – Level 2

- ✓ Normal Forms: 1 NF, 2 NF
- ✓ 3 NF, BCNF and 4 NF
- ✓ Adding PK to Tables
- ✓ Adding FK to Tables
- ✓ Cascading Keys
- ✓ Self Referencing Keys
- ✓ Database Diagrams

Ch 10: Joins & Queries

- ✓ Joins: Table Comparisons
- ✓ Inner Joins & Matching Data
- ✓ Outer Joins: LEFT, RIGHT
- ✓ Full Outer Joins & Aliases
- ✓ Cross Join & Table Combination
- ✓ Joining more than 2 tables

Ch 11: Views & RLS

- ✓ Views: Realtime Usage
- ✓ Storing SELECT in Views
- ✓ DML, SELECT with Views
- ✓ RLS: Row Level Security
- ✓ WITH CHECK OPTION
- ✓ Important System Views

Ch 12: Stored Procedures

- ✓ Stored Procedures: Realtime Use
- ✓ Parameters Concept with SPs
- ✓ Procedures with SELECT
- ✓ System Stored Procedures
- ✓ Metadata Access with SPs
- ✓ SP Recompilations
- ✓ Stored Procedures, Tuning

Ch 13: User Defined Functions

- ✓ Using Functions in MSSQL
- ✓ Scalar Functions in Real-world
- ✓ Inline & Multiline Functions
- ✓ Parameterized Queries
- ✓ Date & Time Functions
- ✓ String Functions & Queries
- ✓ Aggregated Functions & Usage

Ch 14: Triggers & Automations

- ✓ Need for Triggers in Real-world
- ✓ DDL & DML Triggers
- ✓ For / After Triggers
- ✓ Instead Of Triggers
- ✓ Memory Tables with Triggers
- ✓ Disabling DMLs & Triggers

Ch 15: Transactions & ACID

- ✓ Transaction Concepts in OLTP
- ✓ Auto Commit Transaction
- ✓ Explicit Transactions
- ✓ COMMIT, ROLLBACK
- ✓ Checkpoint & Logging
- ✓ Lock Hints & Query Blocking
- ✓ READPAST, LOCKHINT

Ch 16: CTEs & Tuning

- ✓ Common Table Expression
- ✓ Creating and Using CTEs
- ✓ CTEs, In-Memory Processing
- ✓ Using CTEs for DML Operations
- ✓ Using CTEs for Tuning
- ✓ CTEs: Duplicate Row Deletion

Ch 17: Indexes Basics, Tuning

- ✓ Indexes & Tuning
- ✓ Clustered Index, Primary Key
- ✓ Non-Clustered Index & Unique
- ✓ Creating Indexes Manually
- ✓ Composite Keys, Query Optimizer
- ✓ Composite Indexes & Usage

Ch 18: Group By Queries

- ✓ Group By, Distinct Keywords
- ✓ GROUP BY, HAVING
- ✓ Cube() and Rollup()
- ✓ Sub Totals & Grand Totals
- ✓ Grouping() & Usage
- ✓ Group By with UNION
- ✓ Group By with UNION ALL

Ch 19: Joins with Group By

- ✓ Joins with Group By
- ✓ 3 Table, 4 Table Joins
- ✓ Join Queries with Aliases
- ✓ Join Queries & WHERE
- ✓ Join Queries & Group By
- ✓ Joins with Sub Queries
- ✓ Query Execution Order

Ch 20: Sub Queries

- ✓ Sub Queries Concept
- ✓ Sub Queries & Aggregations
- ✓ Joins with Sub Queries
- ✓ Sub Queries with Aliases
- ✓ Sub Queries, Joins, Where
- ✓ Correlated Queries

Ch 21: Cursors & Fetch

- ✓ Cursors: Realtime Usage
- ✓ Local & Global Cursors
- ✓ Scroll & Forward Only Cursors
- ✓ Static & Dynamic Cursors
- ✓ Fetch, Absolute Cursors

Ch 22: Window Functions, CASE

- ✓ IIF Function and Usage
- ✓ CASE Statement Usage
- ✓ Window Functions (Rank)
- ✓ Row_Number ()
- ✓ Rank (), DenseRank ()
- ✓ Partition By & Order By

Ch 23: Merge (Upsert) & CASE, IIF

- ✓ Merge Statement
- ✓ Upsert Operations with Merge
- ✓ Matched and Not Matched
- ✓ IIF & CASE Statements
- ✓ Merge Statement inside SPs
- ✓ Merge with OLTP & DWH

Ch 24: Key Take-Aways from Module 1

- ✓ Case Study 1: Medicare: Tasks, Solutions
- ✓ Case Study 2: ECommerce: Task, Solutions
- ✓ Chapter Wise Assignments: Solutions
- ✓ Dailly Assignments: Review (Feedback)
- ✓ Weekly Mock Interview: Feedbacks

Module 2: Python Concepts

Ch 1: What is Data Engineering?

- ✓ Database Types
- ✓ ETL
- ✓ DWH
- ✓ Cloud Computing
- ✓ Databricks
- ✓ Need for Python in Databricks

Ch 2: Python Introduction

- ✓ Python Introduction
- ✓ Python Versions
- ✓ Python Implementations
- ✓ Python Installations

- ✓ Python IDE & Usage
- ✓ Jupyter Notebooks

Ch 3: Python Operations

- ✓ Basic Operations in Python
- ✓ Python Scripts, Print()
- ✓ Single, Multiline Statements
- ✓ Python: Internal Architecture
- ✓ Compiler Versus Interpreter

Ch 4: Data Types & Variables

- ✓ Integer / Int Data Types
- ✓ Float, String Data Types
- ✓ Sequence Types: List, Tuple
- ✓ Range, Complex & memview
- ✓ Retrieving Data Type: type()

Ch 5: Python Operators

- ✓ Arithmetic, Assignment Ops
- ✓ Comparison Operators
- ✓ Operator Precedence
- ✓ If ... Else Statement, Pass
- ✓ Short Hand If, OR, AND
- ✓ ELIF and ELSE IF Statements

Ch 6: Python Loops, Iterations

- ✓ Python Loop & Realtime Use
- ✓ Python While Loop Statement
- ✓ Break and Continue Statement
- ✓ Iterations & Conditions
- ✓ Exit Conditions & For Loops
- ✓ iter() and Looping Options

Ch 7: Python Functions

- ✓ Python Functions & Usage
- ✓ Function Parameters
- ✓ Default & List Parameters
- ✓ Python Lambda Functions
- ✓ Recursive Functions, Usage
- ✓ Return & Print @ Lambda

Ch 8: Python Modules

- ✓ Import Python Modules
- ✓ Built In Modules & dir
- ✓ datetime module in Python

- ✓ Date Objects Creation
- ✓ strftime Method & Usage
- ✓ imports & datetime.now()

Ch 9: Python User Inputs & TRY

- ✓ Try Except, Exception Handling
- ✓ Raise an exception method
- ✓ TypeError, Scripting in Python
- ✓ Python User Inputs
- ✓ Python Index Numbers
- ✓ input() & raw_input()

Ch 10: Python File Handling

- ✓ File Handling, Activities
- ✓ Loop, Write, Close Files
- ✓ Appending, Overwriting
- ✓ import os, path.exists
- ✓ f.open, f.write
- ✓ f.read, f.close

Ch 11: Pandas DataFrames 1

- ✓ Installation of Pandas
- ✓ Python Modules & Pandas
- ✓ Pandas Codebase & Usage
- ✓ import pandas.DataFrame
- ✓ Pandas Series, arrays

Ch 12: Pandas DataFrames 2

- ✓ Indexes & Named Options
- ✓ Locate Row and Load Rows
- ✓ Row Index & Index Lists
- ✓ Load Files Into a DataFrame
- ✓ df.to_string() Function
- ✓ tail() & null() Function

Ch 13: Pandas Transformations

- ✓ Pandas - Cleaning Data
- ✓ Replace, Transform Columns
- ✓ Data Discovery & Column Fill
- ✓ Identify & Remove Duplicates
- ✓ dropna(), fillna() Functions
- ✓ Data Plotting & matplotlib Lib

Ch 14: Key Take-Aways from Module 2

- ✓ Case Study @ ECommerce: Task, Solutions
- ✓ Chapter Wise Assignments: Solutions

- ✓ **Daily Assignments: Review (Feedback)**
- ✓ **Weekly Mock Interview: Feedbacks**

Module 3: Databricks

Ch 1: Databricks Intro

- ✓ Big Data
- ✓ Open Source ETL
- ✓ What is a Data Lakehouse?
- ✓ Hadoop, MapReduce and Apache Spark

Ch 2: Databricks Architecture

- ✓ Unity Catalog Volume
- ✓ Clusters...
- ✓ Apache Spark and Databricks
- ✓ Apache Spark Ecosystem
- ✓ Compute Activities

Ch 3: Databricks Workspace

- ✓ Workspace Objects
- ✓ Databricks Notebooks
- ✓ Databricks Managed Resources
- ✓ Databricks Workspace UI
- ✓ UI Updates

Ch 4: Databricks Notebooks

- ✓ Databricks Notebooks
- ✓ Mix Languages in Notebooks
- ✓ Comments and Markdown Text to Databricks Notebooks
- ✓ Organizing your Workspace Objects
- ✓ SparkSQL Notebooks

Ch 5: SparkSQL Notebooks - 1

- ✓ Spark SQL API
- ✓ Creating a Catalog, Schema
- ✓ Adding New Columns
- ✓ Changing Data Types
- ✓ Removing Columns
- ✓ Union

Ch 6: SparkSQL Notebooks - 2

- ✓ Math Functions
- ✓ Sort Functions
- ✓ String Functions
- ✓ Datetime Functions
- ✓ Conditional Statements

- ✓ SQL Expressions with `expr()`

Ch 7: SparkSQL Notebooks - 3

- ✓ Volume for our Data Assets
- ✓ Uploading the Countries Data Files
- ✓ File Formats, Schema Inference
- ✓ How to Partition your Data
- ✓ Databricks File System Utilities
- ✓ Creating Views with SQL
- ✓ Creating Catalogs, Schemas and Volumes with SQL

Ch 8: PySpark - 1

- ✓ Dataframes
- ✓ Creation of Dataframes
- ✓ Pandas Dataframes
- ✓ `Dataframe()`
- ✓ List Values, Mixed Values
- ✓ `spark.read.csv()`
- ✓ `spark.read.format()`
- ✓ Filtering DataFrames
- ✓ Grouping your DataFrame
- ✓ Pivot your DataFrame

Ch 9: PySpark - 2

- ✓ `DataFrameReader`
- ✓ `DataFrameWriter` Methods
- ✓ CSV Data into a DataFrame
- ✓ Reading Single Files
- ✓ Reading Multiple Files
- ✓ Schema with an SQL String
- ✓ Schema Programmatically

Ch 10: PySpark – 3

- ✓ Writing DataFrames to CSV
- ✓ Working with JSON
- ✓ Working with ORC
- ✓ Working with Parquet
- ✓ Working with Delta Lake
- ✓ Rendering your DataFrame
- ✓ Creating DataFrames from Python Data Structures

Ch 11: Unity Catalog (Dev)

- ✓ Unity Catalog Managed Tables
- ✓ SQL Queries with the PySpark API
- ✓ Managed Tables with SQL
- ✓ Creating Views with SQL

- ✓ Creating Catalogs, Schemas and Volumes with SQL
- ✓ Dropping Unity Catalog Objects with SQL
- ✓ Temporary Views
- ✓ External Tables, External Volumes

Ch 12: Unity Catalog (Admin)

- ✓ Metastore and the Unity Catalog Object Model
- ✓ Databricks Account Console
- ✓ Data Discovery and Lineage
- ✓ System Tables
- ✓ Databricks Account and Workspace Roles
- ✓ Unity Catalog Privileges and Securable Objects
- ✓ Workspace Access Control Lists (ACLs)
- ✓ Workspace-Catalog Binding
- ✓ Workspace Compute Policies

Ch 13: PySpark Transformations - 1

- ✓ Data Preparation
- ✓ Selecting Columns
- ✓ Column Transformations
- ✓ Renaming Columns
- ✓ Changing Data Types
- ✓ select() and selectExpr()
- ✓ Column Transformations
- ✓ withColumn()

Ch 14: PySpark Transformations - 2

- ✓ Basic Arithmetic and Math Functions
- ✓ String Functions
- ✓ Datetime Conversions
- ✓ Date and Time Functions
- ✓ Joining DataFrames
- ✓ Unioning DataFrames
- ✓ Joining DataFrames

Ch 15: PySpark Transformations - 3

- ✓ Filtering DataFrame Records
- ✓ Removing Duplicate Records
- ✓ Sorting and Limiting Records
- ✓ Filtering Null Values
- ✓ Grouping and Aggregating
- ✓ Pivoting and Unpivoting
- ✓ Conditional Expressions

Ch 16: Medallion Architecture

- ✓ Medallion Architecture

- ✓ Aggregated Data Loads
- ✓ Bronze, Silver and Gold
- ✓ Temp Views
- ✓ Spark Tables (Parquet)
- ✓ Work with File, Table Sources

Ch 17: Delta Lake - 1

- ✓ Storage Layer
- ✓ Delta Table API
- ✓ Deleting Records
- ✓ Updating Records
- ✓ Merging Records
- ✓ History and Time Travel

Ch 18: Delta Lake – 2 (SCD)

- ✓ Schema Evolution
- ✓ Delta Lake Data Files
- ✓ Deleting and Updating Records
- ✓ Merge Into
- ✓ Table Utility Commands
- ✓ Exploratory Data Analysis

Ch 19: Implementation of SCD Type 2

- ✓ Incremental Loads
- ✓ Upserts Versus SCD
- ✓ New Row Inserts
- ✓ Existing Row Updates
- ✓ Old History Retention
- ✓ Delta Transaction Log

Ch 20: Widgets

Text Widgets
User Parameters
Manual Executions
Lake Bridge
Databricks BridgeOne

Ch 21: Lake Flow Jobs

- ✓ Workflows & CRON
- ✓ Job Compute, Running Tasks
- ✓ Python Script Tasks
- ✓ Parameters into Notebook Tasks
- ✓ Parameters into Python Script Tasks
- ✓ Concurrent Executions, Dependencies
- ✓ Branching Control with the If-Else Task

Ch 22: Databricks Tuning

- ✓ How Spark Optimizes your Code
- ✓ Lazy Evaluation
- ✓ Explain Plan
- ✓ Inspecting Query Performance
- ✓ Caching, Data Shuffling
- ✓ Broadcast Joins
- ✓ When to Partition
- ✓ Data Skipping
- ✓ Z Ordering
- ✓ Liquid Clustering
- ✓ Spark Configurations

Ch 23: Version Control & GitHub

- ✓ Local Development
- ✓ Runtime Compatibility
- ✓ Git and GitHub Pre-requisites
- ✓ Git and GitHub Basics
- ✓ Linking GitHub and Databricks
- ✓ Databricks Git Folders
- ✓ Project Code to GitHub
- ✓ Adding Modules to the Project Code
- ✓ Databricks Job Updates, Runs

Ch 24: Spark Structured Streaming

- ✓ Streaming Simulator Notebook
- ✓ Micro-batch Size
- ✓ Schema Inference and Evolution
- ✓ Time Based Aggregations and Watermarking
- ✓ Writing Streams
- ✓ Trigger Intervals
- ✓ Delta Table Streaming Reads and Writes

Ch 25: Auto Loader

- ✓ Reading Streams with Auto Loader
- ✓ Reading a Data Stream
- ✓ Manually Cancel your Data Streams
- ✓ Writing to a Data Stream
- ✓ Workspace Modules

Ch 26: Lake Flow Declarative Pipelines

- ✓ Delta LIVE Tables
- ✓ Data Generator Notebook
- ✓ Pipeline Clusters
- ✓ Databricks CLI
- ✓ Data Quality Checks

- ✓ Streaming Dataset "Simulator"
- ✓ Streaming Live Tables

Ch 27: Security: ACLs

- ✓ Overview of ACLs
- ✓ Adding a New User to our Workspace
- ✓ Workspace Access Control
- ✓ Cluster Access Control
- ✓ Groups

Ch 27: Realtime Project @ Ecommerce / Banking / Sales

- ✓ Detailed Project Requirements
- ✓ Project Solutions
- ✓ Project FAQs
- ✓ Project Flow
- ✓ Interview Questions & Answers
- ✓ Resume Guidance (1:1)

Module 4: Databricks Data Engineer Associate

- ✓ Databricks Data Engineer Associate Exam Guidance
- ✓ Exam Samples
- ✓ Mock Exams



Learn Today, Lead Tomorrow

Courses Offered

1. SQL Server
2. Azure
3. Fabric
4. Power BI
5. AWS
6. Postgres
7. Java
8. Data Science
9. Python
10. Oracle
11. Snowflake
12. AI, CoPilot
13. AI-ML
14. Gen AI, more..

Trending Jobs

- ← Data Analyst
- ← Business Analyst
- ← Data Engineer
- ← SQL Developer
- ← SQL DBA
- ← ETL Admin
- ← Data Scientist



Call Us Now !






+91 9666 64 0801, +91 9666 44 0801

www.sqlschool.com

👉 📞 Reach Us today for Free Demo!

👉 📞 www.sqlschool.com

👉 📞 +919666640801