

BRICKS NOTES

30 Days to Databricks.

Your Learning Journey.

A structured, day-by-day guide to learning Databricks using BricksNotes lessons, blog articles, practice exams, and career tools. From your first SQL query to certification readiness.

BRICKSNOTES.COM

WEEK 1: DAYS 1 TO 7

Getting Started and Core Concepts

Understand your environment. Build durable mental models for working with data.

01 Your Databricks Workspace

A complete tour of Databricks Free Edition interface and how everything connects.

LESSON 0.5

FREE

12 min

02 Data Engineering Fundamentals

How to read this book, why it exists, and how to use Databricks Free Edition.

LESSON 1

FREE

5 min

03 Spark DataFrames Mastery

Understanding Spark DataFrames through an employee salary use case.

LESSON 2

FREE

12 min

04 SQL Query Fundamentals

Using SQL to query DataFrames through a sales reporting use case.

LESSON 3

10 min

05 Data Transformation Techniques

Common data transformations through an orders processing use case.

LESSON 4

15 min

06 Custom Function Development

Writing UDFs and reusable transformation functions.

LESSON 5

14 min

07 Data Integration and Analytics

Combining tables and summarizing data through an online bookstore use case.

LESSON 6

18 min

RECOMMENDED BLOG READING THIS WEEK

- **6 SQL Features That Make Databricks Feel Like a Real Database**
Multi-statement transactions, stored procedures, CTEs, and more
- **Why Fundamentals Feel Slow**
Real understanding takes time. This article will keep you going.

WEEK 1 TIP

You need two things this week: Workspace and Catalog. Do not explore the entire sidebar. Focus on writing code, not navigating menus. Everything else earns its place later.

WEEK 2: DAYS 8 TO 14

Ingestion, Persistence, and Performance

Connect to the outside world. Store data that remembers its history. Make it fast.

08 Enterprise Data Ingestion

Cloud storage, JDBC connections, and file format handling.

LESSON 7 12 min

09 Delta Lake Architecture

Understanding Delta Lake through a payments tracking use case. Time travel, ACID, transaction log.

LESSON 8 14 min

10 Schema Management and Evolution

Adding columns safely, mergeSchema, and handling type changes over time.

LESSON 9 10 min

11 Performance Optimization

How Spark distributes work and how data layout affects speed. Liquid Clustering.

LESSON 10 16 min

12 Storage and File Optimization

Parquet basics, OPTIMIZE, Z-ORDER, and VACUUM.

LESSON 11 12 min

13 Blog: Lakeflow Connect vs Auto Loader vs COPY INTO

Practical comparison of all three ingestion methods with decision framework.

BLOG FREE 10 min

14 Midpoint Check: Practice Exam (Cold)

Take the Associate practice exam without preparation. Use your score as a map.

PRACTICE EXAM FREE 45 Qs

RECOMMENDED BLOG READING THIS WEEK

- **Let the Files Come to You: Auto Loader at Scale**
- **Delta Lake Best Practices: VACUUM, OPTIMIZE, and Time Travel**
- **From 47 Minutes to 5 Minutes: Fixing the Small File Problem**

WEEK 2 TIP

Day 14 is the most important moment so far. Do not study for it. Take it cold. A score of 45% is not failure. It is the most useful map you will get. It tells you exactly where to focus for the next two weeks.

WEEK 3: DAYS 15 TO 21

Advanced Topics and Engineering Practices

Handle real-world complexity. Write code you can trust and maintain.

15 Real-Time Streaming Processing

Structured Streaming, watermarks, and window operations.

LESSON 12 18 min

16 Data Quality Engineering

Schema enforcement, null handling, and validation patterns.

LESSON 13 14 min

17 Change Data Capture

Track changes, read deltas, and process only what changed.

LESSON 14 12 min

18 Historical Data Management

Slowly Changing Dimensions Type 1, Type 2, and history preservation.

LESSON 15 15 min

19 Pipeline Testing and Validation

Testing Spark transformations using sample data and assertions.

LESSON 16 10 min

20 Observability and Debugging

Spark UI, query plans, and diagnosing issues in production.

LESSON 17 14 min

21 Blog: Declarative Automation Bundles CI/CD Guide

Beginner-friendly CI/CD on Databricks. From first deployment to production.

BLOG FREE 15 min

RECOMMENDED BLOG READING THIS WEEK

- [Structured Streaming Best Practices](#)
- [Build a Delta Live Tables Pipeline Using SQL](#)
- [Before and After Unity Catalog](#)
- [Gen AI Does Not Replace Data Engineering](#)

WEEK 3 TIP

This is the hardest week. Streaming, CDC, SCD, debugging. If you feel overwhelmed, slow down. Practice each concept in Free Edition before moving on. Understanding one concept deeply is worth more than skimming three.

WEEK 4: DAYS 22 TO 30

Production, Governance, and Your Career

Deploy with confidence. Get certified. Present your skills. Land the role.

22 Lakehouse Architecture Design

Organizing pipelines using the lakehouse pattern. Medallion architecture.

LESSON 18 16 min

23 Production Orchestration

Scheduling, dependencies, Lakeflow Jobs, trigger types, monitoring.

LESSON 19 12 min

24 Data Governance and Security

Unity Catalog, access control, column masking, row-level security.

LESSON 20 14 min

25 ML Pipeline Development

MLflow, feature engineering, and model training preparation.

LESSON 21 22 min

26 Configuration Reference and BI Tools

Spark, AQE, Delta Lake settings. Connecting Power BI and Tableau.

APPENDIX 18 min

27 Certification Study Guide

Complete roadmap for all 7 exam domains. Priorities, traps, study plan.

GUIDE FREE 20 min

28 Practice Exam: Final Attempt

Retake the practice exam. Compare with Day 14. Measure your growth.

PRACTICE EXAM FREE 45 Qs

29 Interview Readiness

Map what you learned to what interviewers ask. 6 paths. 13 topics. Track confidence.

TOOL FREE

30 Resume Builder

Present your skills truthfully. ATS-friendly. Grounded in what you studied and built.

TOOL FREE

RECOMMENDED BLOG READING THIS WEEK

- [DE Associate vs DE Professional in 2026](#)
- [Unity Catalog Best Practices](#)
- [Databricks Workflows: Orchestration and Production Design](#)

WEEK 4 TIP

If your Day 28 score is above 80% with solid reasoning, book the real exam with confidence. If below 70%, you just saved \$200. Study weak domains for one more week, then retake.

We at Bricksnotes ♥ Data Engineering.

Why we started BricksNotes.

And why we will not stop.

We started BricksNotes because we watched talented engineers struggle with Databricks. Not because the platform is too hard. Because the path was unclear. Too many resources. Too many tabs. Too much theory. Not enough practice.

So we built something calm. One chapter at a time. One concept at a time. Every example runs on Databricks Free Edition. Every lesson starts with a real situation, not a definition. Every tool we build serves one purpose: to make every data professional productive, confident, and ready for what comes next.

Our hard work goes into making your learning easier. We write at 2 AM so you understand by morning. We debug our explanations so you do not have to debug your understanding. We give most of it away for free because we believe the barrier should be effort and consistency, not price.

22-Chapter Book

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Practice Exams

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Certification Guide

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Resume Builder

bricksnotes.com/resume-builder

Pipeline Designer

bricksnotes.com/pipeline-designer

30-Day Journey (this PDF)

bricksnotes.com

*The barrier to becoming a great data engineer should be
effort and consistency, not price.*

BRICKS NOTES
for Data and AI