

ENTERPRISE PROGRAM BRIEF

Databricks Engineering Foundations

Create and operate a small governed Databricks data pipeline.

VNode ITes

F07

DURATION

40 hours

LEVEL

Foundation

FORMAT

Private cohort

AUDIENCE PROFILE

Built for these roles

Data engineers, AI engineers

OVERVIEW

Executive overview

Create and operate a small governed Databricks data pipeline. Proposed instructor-led duration; delivery subject to environment and lab validation.

READINESS

Prerequisites

- Python and SQL competence
- Data engineering fundamentals
- Python, APIs and Git for AI Engineering, or equivalent demonstrable experience
- SQL and Data Engineering Foundations, or equivalent demonstrable experience

PROGRAM OUTCOMES

Capabilities your teams will gain

- Build raw-to-curated Delta processing and scheduled execution
- Prove incremental, duplicate, invalid-record and rerun behaviour
- Run under scoped catalog and workload permissions
- Provide a reproducible project with lineage and operational handover

ENTERPRISE CUSTOMIZATION

Enterprise customization

Tailor this program to your organization's priorities: Create and operate a small governed Databricks data pipeline.

- Private cohort scheduling
- Equivalent-experience entry review

CURRICULUM

Curriculum roadmap

1

MODULE 1 · 8 HOURS

Workspace and compute foundations

Configure a project and query a governed sample dataset.

- Workspace objects
- Compute choices
- Notebooks
- Unity Catalog hierarchy

2

MODULE 2 · 8 HOURS

PySpark and Delta tables

Clean source files and write validated Delta tables.

- DataFrames
- Schemas
- Transformations
- Delta reads and writes

3

MODULE 3 · 8 HOURS

Incremental and declarative pipelines

Build a bounded incremental pipeline and test reruns and rejected records.

- Incremental ingestion
- Streaming tables
- Lakeflow terminology
- Data quality expectations

4

MODULE 4 · 8 HOURS

Governance and workflow operations

Run a job with scoped permissions and diagnose an injected failure.

- Catalog privileges
- Service principals
- Jobs and parameters
- Logs and troubleshooting

5

MODULE 5 · 8 HOURS

Lakehouse project and handover

Deliver a raw-to-curated pipeline with lineage, access and rerun evidence.

- Source contracts
- Analytical serving
- Reconciliation
- Operational documentation

PREPARATION

Environment prerequisites

Azure Databricks workspace with Unity Catalog Appropriate compute/SQL and scoped catalog/storage access AI courses: approved model access, retrieval service and MLflow Deployment courses: supported serverless/Apps/runtime access and service identity Delivery depends on environment and lab validation. This outline does not include step-by-step lab instructions.

CAPSTONE

Capstone

Deliver a raw-to-curated pipeline with lineage, access and rerun evidence. Assessed Databricks lakehouse project Evidence of relevant access, quality and risk controls Demonstration and limitations record

ASSESSMENT

Assessment

Scenario-based practical assessment Build raw-to-curated Delta processing and scheduled execution 30% Prove incremental, duplicate, invalid-record and rerun behaviour 25% Run under scoped catalog and workload permissions 25% Provide a reproducible project with lineage and operational handover 20% Proposed VNode outline-level assessment; no vendor accreditation or completed lab validation implied.

DELIVERABLES

Participant deliverables

- Assessed Databricks lakehouse project
- Evidence of relevant access, quality and risk controls
- Demonstration and limitations record

SCOPE

Scope boundaries

Step-by-step lab instructions; Runnable solution code; Packaged source datasets; Executed environment validation

DELIVERY

Delivery options

Count teaching hours, not calendar days. Exclude breaks. Split into 4-hour or 8-hour teaching sessions; schedule complex project work in contiguous blocks. Proposed hours exclude breaks and are subject to pilot validation.

PRIVATE DELIVERY

Plan a private cohort for your team

Scope delivery format, role mix, and rollout timeline with our solutions team.

[Plan Private Delivery](#)
[Book advisory call](#)