ENTERPRISE PROGRAM BRIEF

AI-Ready Data and Knowledge Engineering with Databricks

Create governed data and retrieval foundations for an enterprise AI application.

VNode ITeS | D04

DURATION	LEVEL	FORMAT
48 hours	Practitioner / specialist	Private cohort

AUDIENCE PROFILE

Built for these roles

Data engineers, AI data practitioners

OVERVIEW

Executive overview

Create governed data and retrieval foundations for an enterprise AI application. Proposed instructor-led duration; delivery subject to environment and lab validation.

READINESS

Prerequisites

- Databricks engineering competence
- AI and Generative AI Foundations, or equivalent demonstrable experience
- Databricks Engineering Foundations, or equivalent demonstrable experience

PROGRAM OUTCOMES

Capabilities your teams will gain

- Deliver governed Databricks knowledge preparation and retrieval
- Measure relevance and verify update and deletion behaviour
- Prove runtime access boundaries before context generation
- Provide reproducible refresh and knowledge-consumption contracts

ENTERPRISE CUSTOMIZATION

Enterprise customization

Tailor this program to your organization's priorities: Create governed data and retrieval foundations for an enterprise AI application.

- Private cohort scheduling
- Equivalent-experience entry review

CURRICULUM

Curriculum roadmap

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MODULE 1 · 8 HOURS

Knowledge product contracts

Define required evidence for a policy assistant and its data dependencies.

- AI tasks
- Sources
- Quality targets
- Access and freshness

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MODULE 2 · 8 HOURS

Source ingestion and provenance

Build a governed ingestion pipeline with source and access metadata.

- Documents and tables
- Stable identifiers
- Versioning
- Ownership

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MODULE 3 · 8 HOURS

Preparation and enrichment

Prepare context units and test malformed, duplicate and obsolete content.

- Parsing
- Chunking
- Deduplication
- Quality checks

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MODULE 4 · 8 HOURS

Retrieval and governance

Build and test retrieval with permission-aware access patterns.

- AI Search indexes
- Embeddings
- Filtering
- Unity Catalog boundaries

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MODULE 5 · 8 HOURS

Quality and lifecycle verification

Measure retrieval performance and verify updates and withdrawals.

- Relevance sets
- Coverage
- Freshness
- Deletion propagation

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MODULE 6 · 8 HOURS

Knowledge engineering capstone

Deliver a reproducible knowledge pipeline and demonstrate access and lifecycle tests.

- Refresh automation
- Monitoring
- Ownership
- Consumer contract

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 reproducible knowledge pipeline and demonstrate access and lifecycle tests. Assessed Databricks knowledge product Evidence of relevant access, quality and risk controls Demonstration and limitations record

ASSESSMENT

Assessment

Scenario-based practical assessment Deliver governed Databricks knowledge preparation and retrieval 30% Measure relevance and verify update and deletion behaviour 25% Prove runtime access boundaries before context generation 25% Provide reproducible refresh and knowledge-consumption contracts 20% Proposed VNode outline-level assessment; no vendor accreditation or completed lab validation implied.

DELIVERABLES

Participant deliverables

- Assessed Databricks knowledge product
- 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