

## 2Days - Databricks Workshop Updated TOC

### Day 1 — Databricks Quality Engineering Strategy & Architecture— 8 Hours

(Strategy + Architecture + Native Databricks Validation)

#### **Module 1 — Enterprise Lakehouse Quality Engineering Blueprint**

**- 2 Hours**

- QA Strategy for Bronze → Silver → Gold
  - QE in Data Mesh & Domain-driven Pipelines
  - How QE contributes to **Deal wins & RFP scoring**
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#### **Module 2 — Databricks Native Data Validation Framework**

**- 2.5 Hours** (*with short demo*)

- Delta Expectations & DLT Validation
  - SLA-driven Workflows & Breakpoints
  - Cost Savings: Native validation vs Additional Tools
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#### **Module 3 — Data Contracts, Governance & Observability**

**- 2 Hours**

- Unity Catalog: Schema Enforcement & Access Controls
  - Lineage-based Compliance for Business KPIs
  - Operational Data Quality Scorecards
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#### **Module 4 — Intelligent Validation Automation at Scale**

**- 1.5 Hours**

- Rule Automation + Audit Trails
  - Databricks AI Functions for Anomaly Detection
  - Photon — When performance testing matters
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## **Day 2: AI-driven QE + Business Narrative and RFP Practicum) 4 Hours**

### **Module 5 — AI & Agents for Data Quality**

**-1.5 Hours** (*Demo included*)

- AI Agents for Drift, RCA & Metadata Search
  - Lightweight RAG with Databricks Vector Search
  - Auto Rule Generation for QE Teams
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### **Module 6 — MLflow Governance for Data & Models**

**- 1 Hour**

- Monitoring Data Freshness & Feature Drift
  - Explainability for Business & Regulatory teams
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### **Module 7 — Retail/CPG QE Solutioning Case Study (Workshop)**

**- 1 Hour** (*Group activity*)

- Product Master & Inventory Quality Validation
  - Business outcomes: Faster insights, reduced escalations
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### **Module 8 — RFP Narrative & Final Architecture Pitch**

**- 30 Minutes**

- QE Differentiation Storyline for Proposals
- Architecture + Value proposition templates
- Next skills roadmap / Certification discussion