training code: DP-750 / ENG DL 4d / EN

Implement data engineering solutions using Azure Databricks

Master end-to-end data engineering with Azure Databricks and Unity Catalog. This course moves from foundational setup to production deployment, covering environment configuration and enterprise-grade governance. Learn to build robust ingestion pipelines, implement security with Unity Catalog, and deploy optimized workloads. By the end, you will have the practical skills to implement, secure, and maintain scalable lakehouse solutions that meet rigorous enterprise requirements.

Training recipients

The training is intended for:

- Data Engineers

Benefits

Foundation skills acquired include:

- Build a solid foundation in Azure Databricks by understanding its architecture, integrations, compute options, and data organization capabilities. Learn how Azure Databricks provides a unified platform for data engineering, analytics, and AI workloads in the cloud.
- You'll learn how to secure and govern your data estate with Unity Catalog.
- You'll learn how to build a data engineering workflow using Azure Databricks and Unity Catalog
- Master the complete lifecycle of building, deploying, and maintaining production-ready data pipelines in Azure Databricks—from design and orchestration to monitoring and optimization.

Training program

1.Set up and configure an Azure Databricks environment

- Explore Azure Databricks
- Understand Azure Databricks architecture
- Understand Azure Databricks Integrations
- Select and Configure Compute in Azure Databricks
- Create and organize objects in Unity Catalog

2.Secure and govern Unity Catalog objects in Azure Databricks

- Secure Unity Catalog objects
- Govern Unity Catalog objects

3.Prepare and process data with Azure Databricks

- Design and implement data modeling with Azure Databricks
- Ingest data into Unity Catalog
- Cleanse, transform, and load data into Unity Catalog
- Implement and manage data quality constraints with Azure Databricks

4.Deploy and maintain data pipelines and workloads with Azure Databricks

- Design and implement data pipelines with Azure Databricks
- Implement Lakeflow Jobs with Azure Databricks
- Implement development lifecycle processes in Azure Databricks
- Monitor, troubleshoot and optimize workloads in Azure Databricks

Expected preparation of the participant

- The target audience is data engineers who have fundamental knowledge of data analytics concepts, a basic understanding of cloud storage, and familiarity with data organization principles. They should be comfortable working with SQL and have experience using Python, including notebooks, for data engineering tasks.
- Learners are expected to have a good understanding of Azure Databricks workspaces and Unity Catalog, along with familiarity with data access patterns and core data engineering and data warehouse concepts. In addition, they should have foundational knowledge of Azure security, including Microsoft Entra ID, and be familiar with Git version control fundamentals.

To increase the comfort of work and training’s effectiveness we suggest using an additional monitor. The lack of additional monitor does not exclude participation in the training, however, it significantly influences the comfort of work during classes.

You can find information and requirements of participation in Distance Learning trainings at:
https://www.altkomakademia.pl/en/how-it-works/about-courses/

Training Includes

* electronic handbook available at:
https://learn.microsoft.com/pl-pl/training/
* access to Altkom Akademia student portal

Duration

4 days / 28 hours

Language

- **Training**: English
- **Materials**: English