

Course : Azure Databricks for data analysts

Practical course - 2d - 14h00 - Ref. DKY

Price : 1680 CHF E.T.

NEW

Over two days, this course enables participants to master Azure Databricks, a key platform in modern cloud ecosystems. Designed for data analysts, it combines theory and hands-on practice to maximize data value, including notebook creation, SQL Analytics usage, and integration with Power BI. Participants leave with immediately applicable skills to accelerate analysis and enhance the impact of their data initiatives.

Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Understand and use the various Databricks functions
- ✓ Creating and manipulating notebooks
- ✓ Setting up jobs
- ✓ Using SQL with Databricks
- ✓ Understanding and using the Databricks datastore
- ✓ Creating dashboards with SQL Analytics
- ✓ Connecting Databricks and Power BI

Intended audience

Data analysts, data professionals, users involved in creating notebooks, manipulating SQL and building integrated dashboards with Power BI.

Prerequisites

Good command of basic SQL, fundamental knowledge of data analysis and dataset manipulation.

Practical details

Hands-on work

Exercises, exchanges.

Teaching methods

Active.

Course schedule

PARTICIPANTS

Data analysts, data professionals, users involved in creating notebooks, manipulating SQL and building integrated dashboards with Power BI.

PREREQUISITES

Good command of basic SQL, fundamental knowledge of data analysis and dataset manipulation.

TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.

Participants also complete a placement test before and after the course to measure the skills they've developed.

1 Azure and Databricks: an overview

- Cloud platform overview and benefits
- Databricks concepts: data lakehouse (ETL and data warehouse), data governance (Unity Catalog)
- Integration with Azure (ADLS, Key Vault, Power BI...)
- The benefits of Databricks

2 Workspaces

- Azure Databricks resources
- Creating a workspace
- Connecting the workspace to external data sources

Hands-on work

Create a workspace and connect it to external data sources.

3 The different types of resources: clusters and SQL warehouse

- Presentation
- The different types of calculation
- Creating a cluster
- Cluster management

Hands-on work

Identify calculation types, create and manage a cluster.

4 Unity Catalog

- Catalog creation
- Connecting to data from Unity Catalog
- Adding a table to the catalog schema
- Setting authorizations for SQL databases
- Focus: connecting to SQL databases
- Other ways of adding catalog data

Hands-on work

Create a catalog, connect it to data from Unity Catalog and to databases.

5 Databricks: notebooks

- Notebook objectives and benefits
- The cell principle
- Controls
- Magic commands
- Transformation with PySpark, SQL
- Using cells and visualizing results
- Exporting and sharing notebooks

Hands-on work

Explore, query and manipulate data on Databricks using various tools (SQL and notebooks) to create analyses.

TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.

6 Databricks SQL

- Databricks SQL: administration
- SQL Editor
- Creating and executing a query
- Sharing query results
- Options available on query results: export, display, display filters, result parameterization

Hands-on work

Create and execute a query, manipulate the results and share them.

7 The dashboard

- Creating a dashboard
- Sharing and publishing options on the dashboard
- Creating an alert on a dashboard

Hands-on work

Create a dashboard and use the various sharing and publishing functions.

8 Connections with Power BI

- Publishing to Power BI from Databricks
- Generating a .pbids file and opening it in Power BI Desktop
- Connecting Power BI Desktop to Databricks

Hands-on work

Publish to Power BI and generate a .pbids file