

Course : Microsoft Fabric data analytic

Practical course - 3d - 21h00 - Ref. FDA

Price : 2360 CHF E.T.

NEW

In three days, explore Microsoft Fabric, the unified platform that is revolutionizing data analysis in the cloud. This training course will enable you to transform your data into strategic insights thanks to reliable, high-performance and scalable analytical models. You'll also discover how to integrate DevOps, security and governance to industrialize your projects and maximize their business value.

Teaching objectives

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

- ✓ Understand the Microsoft Fabric ecosystem, its components, and its role in modern data analysis
- ✓ Locate, access and structure relevant data sources in Fabric
- ✓ Reliably prepare data to feed robust analytical models
- ✓ Use data effectively to generate useful insights
- ✓ Create high-performance, maintainable analytical models for business consumption
- ✓ Ensure scalability and performance of models for large-scale use
- ✓ Integrate DevOps practices in a data environment, manage versions and deployments
- ✓ Guarantee data security and apply governance adapted to resources and users

Intended audience

Data analysts.

Prerequisites

Mastery of basic SQL and data modeling concepts.

PARTICIPANTS

Data analysts.

PREREQUISITES

Mastery of basic SQL and data modeling concepts.

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.

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

Practical details

Exercise

Discussions, practical exercises, work in sub-groups.

Teaching methods

Active.

Course schedule

1 Introducing the Fabric platform

- Explaining the uses of Fabric in a data context
- Identification of the various Fabric modules (lakehouse, warehouse, pipelines, semantic models)

2 Getting data

- Creating a connection
- Data discovery with the OneLake data hub and real-time hub
- On-demand data integration or access
- Lakehouse, warehouse and eventhouse
- Implementing OneLake integration for eventhouse and semantic models

Hands-on work

Identify the best source for your needs. Connect to OneLake and navigate data hubs.

3 Transforming data

- Creating views, functions and stored procedures
- Enrich data by adding new columns or tables
- Implementing a star schema for a lakehouse or warehouse
- Data standardization
- Data aggregation
- Performing merges or joins
- Identify and solve problems involving duplicate data, missing data or Null values
- Data casting
- Data filtering

Hands-on work

Perform complex transformations in SQL or with dataflows. Detect and correct data anomalies. Structure data in star schema.

4 Querying and analyzing data

- Selecting, sorting and aggregating data with Visual Query Editor
- Select, flitrate and aggregate data using SQL
- Data selection, flitration and aggregation with KQL

Hands-on work

Query data with SQL or Visual Query Editor. Knowledge of KQL concepts. Apply filters, aggregations and joins according to use cases.

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.

5 Designing and building semantic models

- Choosing a storage mode
- Implementing a star schema for a semantic model
- Implementation of relationships, such as bridge tables and many-to-many relationships
- Write calculations using DAX variables and functions
- Implementation of calculation groups, dynamic format strings and field parameters
- Identify and configure use cases for large semantic model storage formats
- Design and construction of composite models

Hands-on work

Design a star model with complex relationships. Write advanced measurements with DAX. Use calculation groups, dynamic parameters and storage formats.

6 Optimize enterprise-wide semantic models

- Optimizing query and visual performance
- Improving the performance of DAX functions
- Configuration of Direct Lake settings, including toggle and update options
- Implementing incremental updating of semantic models
- Power BI in Fabric: native integration

Hands-on work

Identify and correct performance bottlenecks. Optimize DAX queries and functions. Configure a high-performance Direct Lake and implement incremental updating.

7 Implementing lifecycle management in Fabric

- Git integration overview
- Implementation of database projects
- Creating and configuring deployment pipelines

Hands-on work

Create an operational deployment pipeline. Identify the impact of a new version.

8 Configuring security and governance

- Implementing workspace-level access controls
- Configure access controls by resource, row, column, object
- Setting up dynamic masking
- Activating and operating workspace logging

Hands-on work

Apply fine-tuned access strategies. Explain and demonstrate dynamic masking. Analyze logs appropriately.