

# Implement a data science and machine learning solution for AI with Microsoft Fabric

This training introduces the basics of ingesting, transforming, and analyzing streaming data with Microsoft Fabric.



## Training recipients

The training is intended for:

- Data Scientists
- Data Engineers



## Benefits

1. Machine Learning Fundamentals in Microsoft Fabric – You'll learn how to run machine learning experiments in MS Fabric.
2. Hands-on learning – Through the labs, you will gain experience that you can easily translate into real tasks at work.
3. Managing ML models in MS Fabric – You will gain knowledge of how MLflow works in MS Fabric.
4. Understanding Data Wrangler – You'll learn how to prepare data for machine learning.
5. Using notebooks – You will learn data mining using machine learning in MS Fabric in practice.



## Training program

1. Introduction to data science in Microsoft Fabric
  - Understand the data science process
  - Explore and process data with Microsoft Fabric
  - Train and score models with Microsoft Fabric
2. Explore data science with notebooks in Microsoft Fabric
  - Explore notebooks
  - Loading data for exploration
  - Overview of data distribution
  - Check for missing data in notebooks
  - Apply advanced data mining techniques
3. Preprocessing data with Data Wrangler in Microsoft Fabric
  - Overview of Data Wrangler
  - Perform data mining
  - Handling Missing Data
  - Transform data using operators.
4. Train and track machine learning models with MLflow in Microsoft Fabric
  - Learn how to train machine learning models
  - Train and track models with MLflow and experiments
  - Model management in Microsoft Fabric.
5. Generate batch predictions using a deployed model in Microsoft Fabric
  - Customize model behavior for batch scoring
  - Prepare data before generating predictions
  - Generate and save predictions to the delta table.



## Expected preparation of the participant

- Knowledge of basic concepts and services related to databases and machine learning.
- Knowledge of the basics of Python and SQL (or at least one of them).
- Completing the DP-900 Learning Path

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

- manual in electronic form available on the platform: <https://learn.microsoft.com/pl-pl/training/>
- access to Altkom Akademia's student portal

Training method:

- Lecture and product presentation (50%)
- Exercise (50%)

Major teaching tools include PowerPoint presentations, test-environment demonstrations, hands-on lab environments, and Microsoft Learn



## Language

Training: English

Materials: English

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## Examination method