

## COURSE: DP604 Implement a data science and machine learning solution for AI with Microsoft Fabric

Dive into the data science process and discover how to train machine learning models for artificial intelligence within Microsoft Fabric. This course covers loading data into a Lakehouse, exploring data using notebooks, preprocessing data with Data Wrangler, training models with MLflow, and generating batch predictions with deployed models.

### Summary

<i>Duration:</i>	<i>1 day</i>
<i>Level:</i>	<i>200</i>
<i>Delivery method:</i>	<i>Virtual Instructor-led class</i>
<i>Language:</i>	<i>English or Bulgarian</i>

\* The difficulty level is consistent with the widely accepted scale of technical difficulty of training on Microsoft Corp

### PREREQUISITES:

Familiarity with basic data concepts and terminology. Understanding of the Python programming language and machine learning frameworks like scikit-learn is advantageous.

### AFTER COMPLETING THE COURSE STUDENTS WILL BE ABLE TO:

- Load and manage data in a Lakehouse within Microsoft Fabric.
- Utilize notebooks for comprehensive data exploration.
- Preprocess data using Microsoft Fabric's Data Wrangler for optimized model training.
- Train and manage machine learning models with ML flow, tracking experiments effectively.
- Generate batch predictions to apply AI in practical scenarios.

### TOPICS:

**Module 1:** Introduction to Data Science in Microsoft Fabric

**Module 2:** Explore Data for Data Science with Notebooks

**Module 3:** Preprocess Data with Data Wrangler in Microsoft Fabric

**Module 4:** Train and Track Machine Learning Models with MLflow

**Module 5:** Generate Batch Predictions using Deployed Models