

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

## content

### **Module 1: Get Started with Data Science in Microsoft Fabric**

- Understand the data science process.
- Train models using notebooks in Microsoft Fabric.
- Track model training metrics with MLflow and experiments.

### **Module 2: Explore Data for Data Science with Notebooks in Microsoft Fabric**

- Load data and perform initial data exploration.
- Gain insights into different types of data distributions.
- Understand missing data and strategies to handle it effectively.
- Visualize data using various techniques and libraries.

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

- Learn the features of Data Wrangler and its role in the data science workflow.
- Perform preprocessing operations essential for data science.
- Handle missing values and apply imputation strategies.
- Use one-hot encoding and other techniques to prepare categorical data for machine learning.

### **Module 4: Train and Track Machine Learning Models with MLflow in Microsoft Fabric**

- Train machine learning models with open-source frameworks.
- Use notebooks in Microsoft Fabric to train models.
- Track training metrics using MLflow and experiments in Microsoft Fabric.

### **Module 5: Generate Batch Predictions Using a Deployed Model in Microsoft Fabric**

- Save a trained model in the Microsoft Fabric workspace.
- Prepare datasets for batch predictions.
- Apply the model to generate new predictions and save them to a Delta table.