

# Course : Implement a data science and machine learning solution for AI using Microsoft Fabric (Microsoft DP-604)

Official Course DP-604

*Practical course - 4d - 28h00 - Ref. MF6*

*Price : 2790 € E.T.*

NEW

In this course, you'll learn how to design and deploy high-performance data science and machine learning solutions using Microsoft Fabric. You'll master the entire data project lifecycle: data exploration and preparation, model training and evaluation, performance monitoring, and deployment to generate actionable predictions. By the end of the course, you'll be able to fully leverage the capabilities of Microsoft Fabric to transform data into concrete decision-making tools.

## Teaching objectives

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

- ✓ Understanding and Leveraging the Data Science Process
- ✓ Explore and Analyze Data with Fabric Notebooks
- ✓ Preparing and Processing Data for Machine Learning
- ✓ Train, monitor, and manage ML models
- ✓ Deploy models and generate predictions

## Intended audience

Data scientists and data professionals who want to design, train, and deploy machine learning solutions with Microsoft Fabric.

## Prerequisites

Familiarity with the data science process, Python, and the main open-source machine learning frameworks. Good written English skills.

### PARTICIPANTS

Data scientists and data professionals who want to design, train, and deploy machine learning solutions with Microsoft Fabric.

### PREREQUISITES

Familiarity with the data science process, Python, and the main open-source machine learning frameworks. Good written English skills.

### TRAINER QUALIFICATIONS

The experts who lead the training courses are specialists in the subjects covered. They are approved by the publisher and certified for the course. They have also been validated by our teaching teams in terms of both professional knowledge and teaching skills for each course they teach. They have at least three to ten years of experience in their field and hold or have held positions of responsibility in companies.

### ASSESSMENT TERMS

Assessment of targeted skills prior to training.

Assessment by the participant, at the end of the training course, of the skills acquired during the training course.

Validation by the trainer of the participant's learning outcomes, specifying the tools used: multiple-choice questions, role-playing exercises, etc.

At the end of each training course, ITTCERT provides participants with a course evaluation questionnaire, which is then analysed by our teaching teams. Participants also complete an official evaluation of the publisher.

An attendance sheet for each half-day of attendance is provided at the end of the training course, along with a certificate of completion if the participant has attended the entire session.

## Practical details

### Teaching methods

The training session will be conducted in French. Official course materials are available in digital format and in English.

### Course schedule

#### 1 Introduction to End-to-End Analytics with Microsoft Fabric

- Explore end-to-end analytics with Microsoft Fabric.
- Understand the roles of data teams and their use of Microsoft Fabric.
- Set up and get started with Microsoft Fabric.

#### 2 Introduction to Data Science in Microsoft Fabric

- Understanding the data science process.
- Explore and process data with Microsoft Fabric.
- Train models and generate predictions with Microsoft Fabric.

#### 3 Explore Data with Microsoft Fabric Notebooks

- Explore our notebooks.
- Load data for exploration.
- Understanding data distribution.
- Detect missing data in notebooks.
- Apply advanced data mining techniques.
- Create visualizations in notebooks.

#### 4 Data Preparation with Data Wrangler in Microsoft Fabric

- Understanding Data Wrangler.
- Conduct data exploration.
- Handle missing data.
- Transform data using operators.

#### 5 Train and monitor machine learning models with MLflow in Microsoft Fabric

- Explore end-to-end analytics with Microsoft Fabric.
- Understanding the Roles of Data Teams with Microsoft Fabric.
- Activating and Getting Started with Microsoft Fabric.

#### 6 Training and Monitoring Machine Learning Models with MLflow in Microsoft Fabric

- Understanding the training of machine learning models.
- Train and monitor models using MLflow and experiments.
- Manage templates in Microsoft Fabric.

### TEACHING AIDS AND TECHNICAL RESOURCES

The teaching resources used are the publisher's official materials and practical exercises.

### TERMS AND DEADLINES

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

### ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you have specific accessibility requirements? Contact Ms FOSSE, disability advisor, at the following address: [psh-accueil@orsys.fr](mailto:psh-accueil@orsys.fr) so that we can assess your request and its feasibility.

## 7 Generate batch predictions from a deployed model

- Customize the model's behavior for batch scoring.
- Prepare the data before generating predictions.
- Generate and save the predictions in a Delta table.

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## Dates and locations

### REMOTE CLASS

2026 : 15 Dec.

2027 : 23 Mar., 1 June, 14 Sep., 7 Dec.

### PARIS LA DÉFENSE

2026 : 15 Dec.

2027 : 23 Mar., 1 June, 14 Sep., 7 Dec.