

Build machine learning solutions using Azure Databricks (DP-3014)

Duration: 1 day

Audience: Professionnel TI

Who is this training for?

This course is designed for aspiring data scientists and AI engineers who need to train and manage machine learning models by using Azure Databricks.

Training objectives

By

the end of this course, students will be able to:

- Train machine learning models using Azure Databricks
- Use MLflow to track machine learning experiment runs in Azure Databricks
- Tune hyperparameters for machine learning models in Azure Databricks
- Use Auto ML to train models in Azure Databricks
- Train deep learning models in Azure Databricks
- Manage machine learning in production with Azure Databricks

Summary

Azure Databricks is a fully managed, cloud-based data analytics platform, which empowers developers to accelerate AI and innovation by simplifying the process of building enterprise-grade data applications. Built as a joint effort by Microsoft and the team that started Apache Spark, Azure Databricks provides data science, engineering, and analytical teams with a single platform for big data processing and machine learning. In this course, you'll learn how to use Azure Databricks to train and deploy machine learning models.

Course outline

Learning Path 1: Build machine learning solutions using Azure Databricks

- Module 1: Explore Azure Databricks

- Module 2: Use Apache Spark in Azure Databricks
- Module 3: Train a machine learning model in Azure Databricks
- Module 4: Use MLflow in Azure Databricks
- Module 5: Tune hyperparameters in Azure Databricks
- Module 6: Use AutoML in Azure Databricks
- Module 7: Train deep learning models in Azure Databricks
- Module 8: Manage machine learning in production with Azure Databricks

Approach and methodology

Practical and structured approach combining focused theory and guided hands-on labs. Participants progressively explore how to build, train, optimize, and deploy machine learning solutions using Azure Databricks through realistic exercises inspired by data science and AI scenarios. They learn how to leverage Apache Spark, MLflow, AutoML, and deep learning capabilities to develop scalable machine learning workflows and manage models throughout their lifecycle. Led by a Microsoft Certified Trainer (MCT), the training emphasizes interactivity, experimentation, and the development of practical skills that can be directly applied to machine learning projects in a professional environment.

Prerequisites

Students

should have the following knowledge and experience before attending this course:

- Experience of programming with Python
- Experience of working with Microsoft Azure services

Recommendations

Consider taking the Build Machine Learning Models learning path before you start this one.