

Implement Generative AI engineering with Azure Databricks (DP-3028)

Duration: 1 day

Audience: Professionnel TI

Who is this training for?

This course is for data scientists, machine learning engineers, and other AI professionals who want to develop generative AI applications with Azure Databricks. It is intended for professionals familiar with the fundamental concepts of AI and the Azure Databricks platform.

Training objectives

- Design and develop generative AI solutions with Azure Databricks
- Leverage core models and large language models (LLMs) in Databricks
- Refine and deploy generative AI models on Azure Databricks
- Integrate generative AI capabilities into business applications
- Apply best practices in responsible AI and data governance

Summary

This course covers generative AI engineering on Azure Databricks, using Spark to explore, refine, evaluate, and integrate advanced language models. It teaches how to implement techniques such as Augmented Generation by Recovery (RAG) and multi-step reasoning, as well as how to refine large language models for specific tasks and evaluate their performance. You'll also learn responsible AI practices for deploying AI solutions and managing models in production with Large Language Model Operations (LLMOps) on Azure Databricks.

Course outline

Module 1: Introduction to Generative AI

Module 2: Basic Models and LLMs in Databricks

Module 3: RAG and Advanced Techniques

Module 4: Model Refinement

Module 5: Deployment and LLMOps

Approach and methodology

Practical and structured approach combining focused theory and guided workshops. Participants gradually implement generative AI engineering with Azure Databricks through real-world exercises inspired by business scenarios, promoting immediate application of learnings. They learn how to prepare and govern data, design pipelines (ingestion, transformation, features), orchestrate model training and evaluation, and then industrialize deployment and monitoring in Databricks environments. Led by a Microsoft certified trainer, the training focuses on interactivity and the acquisition of directly transferable operational skills to deliver reliable, secure and scalable generative AI solutions in a professional context.

Prerequisites

- Fundamental knowledge in AI/machine learning.
- Familiarity with the Azure Databricks platform (workspaces, notebooks, basic uses).
- LLM/NLP basics (useful for following the RAG modules, reasoning, fine-tuning, evaluation).

Recommendations

- Be comfortable with Databricks concepts and practices (Spark, notebooks) to take full advantage of the workshops.
- Have already handled or understood generative AI techniques such as RAG, fine-tuning, evaluation (accelerates progression).
- Interest in industrialization: LLMOps, production, governance and responsible AI (since this is an important part of the course).