

**Build AI Apps with Azure Database for PostgreSQL (AI-3019)**

**Course Number:** MOC-AI-3019  
**Duration:** 0.5 days

**Overview**

This official Microsoft course, Build AI Apps with Azure Database for PostgreSQL (AI-3019), teaches learners how the Azure AI and Azure Machine Learning Services integrations provided by the Azure AI extension for Azure Database for PostgreSQL—Flexible Server can enable them to build AI-powered apps.

**Prerequisites**

All learners must have experience working with PostgreSQL databases, writing SQL queries, and a general understanding of AI and ML concepts.

**Materials**

All Microsoft Azure AI training students receive Microsoft official courseware.

For all Microsoft Official Courses taught in their entirety that have a corresponding certification exam, an exam voucher is included for each participant.

**Software Needed on Each Student PC**

Attendees will not need to install any software on their computers for this class. The class will be conducted in a remote environment that Accelebrate will provide; students will only need a local computer with a web browser and a stable Internet connection. Any recent version of Microsoft Edge, Mozilla Firefox, or Google Chrome will work well.

**Objectives**

* Understand generative AI language models and the Azure AI extension
* Implement semantic search in Azure Database for PostgreSQL
* Utilize Azure AI services for data summarization, sentiment analysis, and opinion mining
* Extract key phrases, entities, and PII from text using Azure AI Language
* Translate text using Azure AI Translator within Azure Database for PostgreSQL
* Leverage Azure Machine Learning for model inferencing within Azure Database for PostgreSQL

**Outline**

* Get started with generative AI in Azure Database for PostgreSQL
  + Understand generative AI language models
  + Describe the Azure AI extension
  + Explore the Azure OpenAI schema
  + Review the Azure Cognitive schema
  + Examine the Azure Machine Learning schema
* Enable semantic search in Azure Database for PostgreSQL
  + Understand semantic search
  + Store vectors in Azure Database for PostgreSQL
  + Create embeddings with the Azure AI extension
  + Explore semantic search use cases
* Summarize data with Azure AI Services and Azure database for PostgreSQL
  + Explain extractive summarization
  + Explore abstractive summarization
* Perform sentiment analysis and opinion mining with Azure Database for PostgreSQL
  + Explore sentiment analysis
  + Describe opinion mining
* Extract insights using Azure AI Language and Azure Database for PostgreSQL
  + Extract key phrases
  + Recognize entities
  + Recognize personally identifiable information (PII) entities
* Translate Text with Azure AI Translator and Azure Database for PostgreSQL
  + Explore the Azure AI Translator Service
  + Translate data in Azure Database for PostgreSQL
* Use Azure Machine Learning for inferencing from Azure Database for PostgreSQL
  + Explore Azure Machine Learning
  + Invoke Azure Machine Learning models