

**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