

DW-200: Azure OpenAI Workshop

Duration: 16 hours

Module 1: Azure AI Services, Azure AI Studio and Azure OpenAI Service models

- Introduction to Azure AI services and LLMs
- Azure OpenAI Service
- Introduction to Responsible AI
- Components and key concepts of Azure OpenAI
- Azure AI Studio
- Azure OpenAI models
- ✓ Text and Code Models
- ✓ GPT-4 Turbo with Vision
- ✓ DALL-E 3(Preview)
- ✓ Whisper (Preview)
- Managing models
- Provisioned throughput units (PTU)
- Using function calling with Azure OpenAI Service (Preview)
- Availability and pricing

Hands on Labs

- Provisioning Azure OpenAI resource
- Use Azure AI Studio to explore models in playgrounds
- Generating images using DALL-E and DALL-E 3
- Speech to text conversion using Azure OpenAI Whisper model
- Get started using GPT-4 Turbo with Vision on your images and videos in Azure AI Studio

Module 2: Prompt engineering, Embeddings and RAG

- Introduction to prompt engineering
- Prompt engineering techniques
- Understanding embeddings in Azure OpenAI Service
- Plugins
- Azure AI Search
- Full text search
- Semantic ranking
- Retrieval augmented generation - RAG
- Vector search
- Semantic Kernel

Hands on Labs

- Q&A with Semantic Answering with Azure OpenAI Service
- Building a chat app (using Python) using an Azure OpenAI Service and RAG

Module 3: Azure OpenAI on your data

- Customize a model with fine-tuning
- Using Azure OpenAI with large datasets
- Using your data - text(preview)
- Using your data - image(preview)

- Prompt flow and LLMOps

Module 4: Monitoring usage and implementing Responsible AI

- Introduction to Abuse monitoring, Content filtering, Content Filtering in Azure AI Studio
- Data, privacy, and security for Azure OpenAI Service
- Configuring Azure OpenAI Service with Managed Identities and Azure Cognitive Services virtual networks
- Manage quota
- Azure OpenAI Service encryption of data at rest
- Monitoring Azure OpenAI Service
- Planning to manage costs for Azure OpenAI Service
- Responsible AI principles and practices for Azure OpenAI

Hands on Labs

- Creating a web app and your own copilot with custom data using Azure OpenAI Service
- Build and deploy a question and answer copilot with prompt flow in Azure AI Studio
- Moderate text and images with content safety in Azure AI Studio
- Azure OpenAI GPT 3.5 Turbo fine-tuning