MICROSOFT TRAINING

Build Ai Copilot App With Azure Ai Studio And Semantic Kernel

Develop AI Copilot apps using Azure AI Studio and Semantic Kernel. Build intelligent solutions for real-world scenarios.

DURATION
48 hours

LEVEL
Intermediate

FORMAT
Instructor-Led

- Globally Recognized Certification
- Expert-Led Hands-On Training
- Flexible Scheduling

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COURSE OVERVIEW

Unlock the power of conversational AI by mastering the development of intelligent Copilot applications with this intermediate-level course. Designed for developers and AI enthusiasts, this program dives deep into leveraging Microsoft's cutting-edge Azure AI Studio for orchestrating AI workflows and integrating large language models (LLMs). You'll gain hands-on experience in setting up robust AI projects, experimenting with various models, and managing the entire AI development lifecycle within a unified platform.

The core of this course focuses on the Semantic Kernel, an open-source SDK that empowers developers to combine LLMs with conventional programming languages. You'll learn how to seamlessly integrate AI capabilities into your applications, build sophisticated prompt engineering techniques, create custom plugins, and implement advanced features like Retrieval Augmented Generation (RAG) to ensure your Copilots are contextually aware and provide accurate, relevant information. By the end of this 48-hour intensive training, you will be equipped with the practical skills to design, build, and deploy your own AI Copilot applications, positioning you at the forefront of AI-driven innovation and opening doors to exciting career opportunities in AI development.

Duration	48 hours
Level	Intermediate
Vendor	Microsoft

COURSE CURRICULUM

01 Module 1: Introduction to AI Copilots and Azure AI Studio

- Understanding Generative AI and Large Language Models (LLMs)
- Introduction to AI Copilots and their architecture
- Overview of Azure AI Studio capabilities and benefits
- Setting up your Azure AI Studio project and resources
- Exploring foundational models in Azure AI Studio

02 Module 2: Fundamentals of Semantic Kernel

- Introduction to Semantic Kernel: Principles and architecture
- Setting up your Semantic Kernel development environment
- Working with Kernels, Prompts, and Functions
- Integrating LLMs with Semantic Kernel
- Managing context and conversational memory

03 Module 3: Advanced Prompt Engineering and Plugins

- Techniques for effective prompt design and optimization
- Implementing custom Semantic Functions (Skills)
- Creating Native Functions for external tool integration
- Developing plugins to extend Copilot capabilities
- Orchestrating complex workflows with multiple skills and plugins

04 Module 4: Building Intelligent Copilot Apps with RAG

- Understanding Retrieval Augmented Generation (RAG)
- Indexing and managing data with Azure AI Search (formerly Azure Cognitive Search)
- Implementing RAG patterns for context-aware responses
- Connecting Copilots to proprietary data sources

- Best practices for data security and privacy in AI applications

05 Module 5: Deployment, Monitoring, and Ethical AI

- Strategies for deploying Semantic Kernel applications
- Monitoring Copilot performance and user interaction
- Implementing responsible AI principles in Copilot development
- Security considerations for AI applications on Azure
- Scaling and optimizing Copilot solutions for production environments

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

> **AI Solutions Developer**

> **Azure AI Engineer**

> **Conversational AI Architect**

FREQUENTLY ASKED QUESTIONS

Q: What are the recommended prerequisites for effectively taking the 'Build AI Copilot App' course?

To get the most out of this course, participants should have intermediate programming skills, preferably in C# or Python, as Semantic Kernel supports both. A foundational understanding of cloud computing concepts and basic experience with Azure services (e.g., Azure Portal, Azure App Service) would also be beneficial, though not strictly required, as key Azure AI Studio concepts will be covered.

Q: How will this course specifically enable me to integrate custom business logic and proprietary data into AI Copilots for enterprise environments?

This course dedicates significant modules to building and integrating custom plugins (Native and Semantic Functions) with Semantic Kernel, allowing you to connect your Copilot to internal APIs, databases, and existing business processes. Furthermore, you'll learn to implement Retrieval Augmented Generation (RAG) using Azure AI Search to securely integrate and leverage your organization's proprietary data for contextually relevant and accurate AI responses, a critical skill for enterprise-grade solutions.

Q: What is the key differentiator between learning general prompt engineering and the prompt engineering taught in this Semantic Kernel course?

While general prompt engineering focuses on crafting effective prompts for LLMs, this course goes further by teaching prompt engineering within the structured framework of Semantic Kernel. You'll learn how to modularize prompts into 'Skills,' chain them together, use context variables, and integrate them with code-based functions (Native Functions) to build robust, maintainable, and scalable AI applications, moving beyond ad-hoc prompting to systematic AI solution development.

ABOUT COMPUTER PRIDE

computerpride

East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+	10,000+	50+
Years of Excellence	Professionals Trained	Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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