



MICROSOFT TRAINING

Azure AI Foundry + Agents + GitHub

Master Azure AI Foundry, Agents, and GitHub for advanced AI solution development and deployment.

DURATION

48 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

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

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COURSE OVERVIEW

This intermediate-level course dives deep into "Azure AI Foundry + Agents + GitHub," equipping professionals with the comprehensive skills needed to design, develop, and deploy cutting-edge AI solutions. You will master the Azure AI Foundry platform, Microsoft's end-to-end environment for the entire AI lifecycle, from data preparation and model training to deployment and monitoring. The curriculum emphasizes practical application, allowing you to build robust, scalable AI models and integrate them seamlessly into enterprise systems.

A core focus of this program is the development of intelligent AI Agents and copilots, exploring how to leverage advanced AI services to create autonomous and semi-autonomous systems that can automate complex tasks, enhance decision-making, and provide personalized user experiences. Furthermore, you will learn to implement best practices for MLOps (Machine Learning Operations) using GitHub, ensuring version control, continuous integration/continuous deployment (CI/CD), and collaborative development for your AI projects. By the end of this 48-hour intensive training, you will be proficient in orchestrating the entire AI workflow, from concept to production, ready to drive innovation in an AI-driven world. This certification positions you to solve complex business problems, streamline operations, and create new value streams through intelligent automation and sophisticated AI capabilities, significantly boosting your professional profile in the rapidly expanding field of artificial intelligence.

Duration	48 hours
Level	Intermediate
Vendor	Microsoft

COURSE CURRICULUM

01 Module 1: Introduction to Azure AI Foundry & Core Concepts

- Overview of the Azure AI Ecosystem and Services
- Deep Dive into Azure AI Foundry: Components, Architecture, and Workflow
- Fundamentals of Machine Learning and Deep Learning Relevant to AI Foundry
- Introduction to Responsible AI Principles, Ethics, and Governance
- Setting up Your Development Environment for Azure AI Projects

02 Module 2: Building and Deploying AI Models with Azure AI Foundry

- Data Ingestion, Preparation, and Feature Engineering within AI Foundry
- Model Training, Experimentation Management, and Tracking
- Hyperparameter Tuning and Model Optimization Techniques
- Model Evaluation, Validation, and Interpretation
- Deploying AI Models as Scalable Endpoints and Web Services

03 Module 3: Developing Intelligent AI Agents and Copilots

- Understanding AI Agent Architectures and Design Patterns
- Leveraging Azure Cognitive Services for Agent Capabilities (Vision, Speech, Language)
- Building Conversational AI with Azure Bot Service and Large Language Models
- Implementing Agent Orchestration, Tool Integration, and Task Automation
- Designing Multi-Agent Systems and Collaborative AI Workflows

04 Module 4: MLOps with GitHub for AI Solutions

- Introduction to MLOps Principles, Best Practices, and Lifecycle Management
- Version Control for AI Projects using Git and GitHub
- Automating AI Workflows with GitHub Actions for CI/CD

- Model Registry, Lifecycle Management, and Governance in Azure ML
- Monitoring, Retraining, and Maintaining Deployed AI Models

05 Module 5: Advanced Topics and Real-world Applications

- Scalability, Performance Optimization, and Cost Management for AI Solutions
- Security Considerations and Compliance for AI Systems in Azure
- Integration of AI Solutions with Enterprise Applications
- Case Studies: Real-world Azure AI Foundry and Agent Implementations
- Future Trends in AI, AI Agents, and Ethical Considerations

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Azure AI Solutions Architect**
- > **Intelligent Agent Developer (Microsoft Ecosystem)**
- > **MLOps Engineer (Azure & GitHub Focus)**

FREQUENTLY ASKED QUESTIONS

Q: What are the essential prerequisites for enrolling in the Azure AI Foundry + Agents + GitHub course?

This course is designed for an intermediate audience. Participants should have a foundational understanding of Python programming, basic concepts of machine learning (e.g., supervised vs. unsupervised learning, model evaluation), and familiarity with core Azure services (e.g., Azure compute, storage, networking basics). Prior experience with version control systems like Git and GitHub, along with command-line interfaces, will also be highly beneficial for maximizing your learning.

Q: How will mastering Azure AI Foundry and AI Agents with GitHub specifically enhance my career opportunities in the AI domain?

This specialized course positions you at the forefront of AI development by providing hands-on expertise in Microsoft's unified AI platform and cutting-edge agent technology. You will gain in-demand skills in end-to-end AI solution development, MLOps, and the creation of intelligent autonomous systems, making you highly sought after for roles such as AI Solutions Architect, Intelligent Agent Developer, or MLOps Engineer focused on Azure environments. The ability to leverage GitHub for collaborative, production-grade AI projects is a critical differentiator in today's job market.

Q: Beyond theoretical knowledge, what practical, hands-on skills will I acquire for building and deploying AI Agents using Azure AI Foundry and GitHub?

You will gain practical, deployable skills. You will learn to leverage Azure AI Foundry to manage datasets, train and evaluate custom machine learning models, and deploy them as scalable endpoints. Crucially, you will master the design, development, and integration of AI agents using Azure Cognitive Services and large language models, implementing agent orchestration and building conversational AI interfaces. Furthermore, you will set up robust MLOps practices, including designing and implementing CI/CD pipelines with GitHub Actions for automated testing, deployment, and continuous monitoring of your agent-driven AI solutions.

ABOUT COMPUTER PRIDE



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+

Years of Excellence

10,000+

Professionals Trained

50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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