

# MS-4015: Build custom engine copilots for Microsoft Teams

**Course Duration: 8 Hours**

**Course code: MS-4015**

## 1. Course Overview

The *MS-4015: Build Custom Engine Copilots for Microsoft Teams* course equips learners with the skills to design, develop, and integrate custom copilots within Microsoft Teams using advanced AI capabilities. Participants will explore the Teams development environment, leverage Microsoft Copilot Studio, and integrate backend systems to create intelligent assistants that enhance productivity and streamline workflows. This course blends theory with hands-on exercises, enabling learners to confidently build, test, and deploy custom copilots for enterprise environments.

## 2. What You'll Learn?

By the end of this course, you will be able to:

- Understand the fundamentals of Microsoft Copilot technology and AI integration within Teams.
- Configure the Microsoft Teams development environment for copilot creation.
- Build custom copilots using Microsoft Copilot Studio.
- Integrate copilots with Microsoft Graph and other APIs.
- Implement natural language processing to enhance user interaction.
- Test, debug, and optimize copilots for enterprise use.
- Deploy copilots securely in organizational Teams channels.

## 3. Target Audience

This course is ideal for:

- Microsoft Teams Developers
- AI Developers and Solution Architects
- IT Professionals integrating AI into collaboration tools
- Power Platform Developers
- Business Analysts and Project Managers working on automation solutions

## 4. Pre-Requisites

Before attending this course, participants should have:

- Basic knowledge of Microsoft Teams and its features.
- Familiarity with Power Platform (Power Apps, Power Automate).
- Understanding of REST APIs and JSON.
- Basic programming knowledge (JavaScript/TypeScript preferred).

## 5. Course Content

### **Module 1: Introduction to Copilots in Microsoft Teams**

- Overview of Microsoft Copilot technology
- Benefits of integrating copilots in Teams
- Understanding AI-powered workflows

### **Module 2: Setting Up the Development Environment**

- Installing required tools and SDKs
- Configuring Teams for developer mode
- Introduction to Microsoft Copilot Studio

### **Module 3: Building Your First Custom Copilot**

- Creating a copilot project
- Designing conversation flows
- Using AI prompts and responses

#### **Module 4: Integrating APIs and Data Sources**

- Connecting with Microsoft Graph API
- Working with external data connectors
- Handling authentication and security

#### **Module 5: Enhancing Copilot Intelligence**

- Implementing natural language understanding (NLU)
- Personalizing user interactions
- Error handling and fallback strategies

#### **Module 6: Testing and Debugging Copilots**

- Debugging techniques in Copilot Studio
- Unit and integration testing
- Performance optimization

#### **Module 7: Deployment and Governance**

- Publishing copilots to Teams channels
- Managing permissions and roles
- Governance best practices for enterprise deployments