

Building Intelligent AI Agents with Copilot, Automation & Advanced GenAI (Claude)

DAY 1 – Foundations: From Zero to First Agent

Module 1: AI Agent Ecosystem Overview

- 1 What is an AI Agent vs traditional chatbot
- 2 Power Platform fundamentals overview
- 3 Understanding environments in Power Platform
- 4 Understanding solutions (why & how used)
- 5 Copilot Studio architecture
- 6 Role of Copilot Studio
- 7 Role of Power Automate
- 8 Role of Azure AI Speech
- 9 Real-world use case: Customer Support Automation

Module 2: Getting Started with Copilot Studio

- 1 Environment setup
- 2 Create new agent
- 3 Interface walkthrough
- 4 Create topics
- 5 Trigger phrases
- 6 Testing agent
- 7 Publishing agent

Module 3: Conversation Design Basics

- 1 Topic structure
- 2 Branching logic
- 3 Fallback handling
- 4 Conversation design patterns
- 5 UX best practices

DAY 2 – Intelligence Layer: Topics, Entities & Context

Module 4: Entities & Variables

- 1 System entities
- 2 Custom entities
- 3 Variable creation
- 4 Context handling across topics
- 5 Capturing user input dynamically

Module 5: Advanced Topic Design

- 1 Reusable topics
- 2 Dynamic conversation flows
- 3 Error handling strategies
- 4 Conversation optimization

Module 6: Generative AI in Copilot Studio

- 1 AI-based topic generation
- 2 Knowledge sources integration
- 3 Generative responses
- 4 Enhancing conversations using AI

DAY 3 – Action Layer: Power Automate Integration

Module 7: Power Automate Integration

- 1 Why workflows matter
- 2 Types of flows
- 3 Trigger flows from Copilot
- 4 Returning response to agent

Module 8: Background Workflows

- 1 Ticket creation system
- 2 Email automation
- 3 Dataverse / SharePoint integration
- 4 Processing business logic

Module 9: Real-world Scenario Build

- 1 Customer issue lifecycle
- 2 Ticket creation & tracking
- 3 Status updates
- 4 End-to-end integration

DAY 4 – Voice Enablement & Capstone Project

Module 10: Azure AI Speech Integration

- 1 Speech-to-text (STT)
- 2 Text-to-speech (TTS)
- 3 Voice pipeline understanding
- 4 Voice design basics

Module 11: Voice-enabled Agent Design

- 1 Connecting voice with agent
- 2 Handling spoken conversations
- 3 Designing natural voice responses
- 4 Testing voice bot

Module 12: Final Capstone Project

- 1 Build AI customer support agent
- 2 Integrate Power Automate workflows
- 3 Enable voice interaction
- 4 Deliver end-to-end solution

DAY 5 – Advanced GenAI with Claude AI

Module 13: Claude AI & Advanced Prompting

- 1 Introduction to Claude AI
- 2 Comparison with other LLMs
- 3 Prompt engineering fundamentals
- 4 Role-based prompting
- 5 Step-by-step reasoning techniques
- 6 Business use-case prompt design
- 7 Hands-on prompt building

Module 14: Claude Integration & Real-world Use Cases

- 1 Claude API concepts
- 2 Integration with applications (.NET / Power Platform)
- 3 Document analysis & summarization
- 4 AI decision-making in workflows
- 5 Enhancing Copilot agents using Claude
- 6 Real-world enterprise scenarios
- 7 Capstone enhancement with Claude