

Generative AI for Solution Architects

Duration: 15 hours

Course Overview

This comprehensive course equips architects with the foundational knowledge and practical skills needed to leverage Generative AI in enterprise solution design. Covering key AI-driven methodologies across documentation, infrastructure planning, IT operations automation, and secure AI solutioning, participants will explore real-world use cases of AI-enhanced workflows. Through interactive demos and hands-on walkthroughs, learners will gain experience using tools like ChatGPT, Azure OpenAI, Microsoft Copilot, and Power Platform to streamline architecture planning, automate technical documentation, and optimize IT operations. By the end of the course, architects will be empowered to integrate AI seamlessly into their solution design process, enhancing efficiency and innovation while maintaining security and compliance standards.

Course Contents

Module 1: Foundations of Generative AI for Architects

Duration: 3 Hours

Topics:

- What is Generative AI? How is it relevant to architects?
- Generative AI use cases in enterprise solutioning
- Comparing ChatGPT, Azure OpenAI, Microsoft Copilot
- Identifying high-impact areas: documentation, planning, automation

Demo/Walkthrough:

- Use ChatGPT/Azure OpenAI to create a design proposal, architecture summary, and stakeholder brief

Module 2: AI-Driven Solution Design & Documentation

Duration: 3 Hours

Topics:

- Using AI to support requirement gathering and analysis
- Generating solution overviews, architecture narratives, and functional specs
- Reviewing and summarizing long technical documents with ChatGPT
- Drafting solution comparison matrices and documentation templates

Demo/Walkthrough:

- Create and refine a high-level solution design document using ChatGPT
- Use Copilot in Word to polish technical documents

Module 3: Infrastructure & Network Planning Using AI

Duration: 3 Hours

Topics:

- Leveraging AI to assist in infra/network documentation
- AI-generated templates for VM sizing, DR plans, backup schedules
- Explaining network topologies, firewall setups, or SLA details using natural language
- Using SharePoint/Teams as central collaboration platforms for AI-enhanced content

Demo/Walkthrough:

- Generate SharePoint-based architecture documentation site using Copilot and AI summaries
- Use ChatGPT to create infra documentation outlines for internal use

Module 4: Automating IT Ops with Power Platform & GenAI

Duration: 3 Hours

Topics:

- Power Automate + AI Builder for creating intelligent flows
- Use cases: employee onboarding, access request automation, daily report summaries
- Creating flows triggered by SharePoint/Teams
- Approvals and notifications powered by AI-generated insights

Demo/Walkthrough:

- Build a sample automated flow for user access request using Power Automate + AI Builder
- Set up a SharePoint list + Teams notification using automation

Module 5: Microsoft 365 Copilot & Secure AI Solutioning

Duration: 3 Hours

Topics:

- Overview of Microsoft 365 Copilot capabilities in Outlook, Word, Excel, Teams
- Security and compliance considerations for using Copilot
- Data governance: DLP, audit logs, and access control

- Architecting solutions where Copilot can assist IT users, architects, or business teams
- Responsible AI and risk mitigation

Demo/Walkthrough:

- Explore real use cases of Copilot in Outlook (meeting summary), Excel (data prep), Teams (meeting notes)
- Design a secure AI-assisted process using SharePoint + Copilot + Teams