

AI Technical Practitioner

Course description

The AI Technical Practitioner Program is designed for technical professionals who want to build practical skills in applying OpenAI technologies for real-world business and enterprise scenarios. The program covers core AI techniques, prompt engineering, RAG, embeddings, responsible AI, governance, and practical AI implementation considerations.

Participants will explore OpenAI product capabilities including ChatGPT, Deep Research, Advanced Data Analysis, Canvas, connectors, administration, OpenAI Platform fundamentals, API models, Responses API tools, web search, file search, vector stores, evals, and optimization strategies.

The course also includes Model Context Protocol, API solution patterns, and a hands-on lab for Building CustomGPT with Actions.

- Course level: Fundamental
- Duration: 2 day

Activities

This course includes presentations, hands-on labs, demonstrations, and group exercises.

Course objectives

In this course, you will learn to:

- Understand OpenAI technical ecosystem
- Build AI-powered applications
- Work with OpenAI APIs
- Design AI workflows and integrations
- Understand RAG and AI agents
- Build enterprise AI solutions

Intended audience

This course is intended for those with limited prior knowledge of generative AI:

- Solution architects
- AI engineers
- Developers
- Technical consultants
- Software engineers

Prerequisites

We recommend that attendees of this course have:

- Basic understanding of software development concepts
- Familiarity with web applications and APIs
- Basic programming knowledge is recommended
- Interest in learning and applying AI technologies in practical business and technical scenarios
- Access to ChatGPT and OpenAI Platform accounts for hands-on practice

Course outline

Module 1: AI Techniques

Introduction to AI Part-1

Introduction to AI

AI Fundamentals
Machine Learning Basics
Deep Learning Overview
Generative AI Introduction
Foundation Models
Large Language Models (LLMs)
AI Applications and Use Cases

Intro to AI Techniques – Part 2

Prompt Engineering Fundamentals
Prompt Design Techniques
Zero-Shot Prompting
One-Shot Prompting
Few-Shot Prompting
Chain-of-Thought Prompting
Prompt Evaluation
Prompt Optimization

Introduction to AI Techniques Pt-3

Retrieval-Augmented Generation (RAG)
Embeddings
Vector Databases
Fine-Tuning Concepts
AI Safety
Responsible AI
AI Governance
Practical AI Implementation Considerations

Module- 2: OpenAI Product Deep Dive

ChatGPT Deep Dive

- ChatGPT Deep Dive
- Deep Research
- Advanced Data Analysis
- Memory in ChatGPT
- Canvas & Workflows
- Administration
- Positioning Use Cases
- Connectors & Advanced Capabilities

- Competitive Positioning
- Running a Demo: Preset
- Running a Demo: Present
- Running a Demo: Putting it Together

API Platform – DeepDive Part 1

- What is an API?
- OpenAI Platform Fundamentals
- API Models
- Platform Core Concepts

API Platform DeepDive Part 2

- Tools in the Responses API: What They Are and How They Run
- Connectors and MCP: Extending Models with Remote Tools Safely
- Web Search: Internet Access Patterns and Best Practices
- File Search and Retrieval Patterns
- Vector Stores and Knowledge Grounding
- Evals and Quality Measurement
- Optimization Strategies
- Prompting vs Retrieval vs Fine-Tuning

Module-3: Model Context Protocol

Model Context Protocol

- Introduction to Model Context Protocol (MCP)
- How it Works?
- Core Primitives
- Protocol-Level Primitives
- MCP Architecture
- Limitations and Risks
- Security Considerations
- Enterprise Governance

Module-4: API Solutions DeepDive

OpenAI Solution Part-1

- The Value Framework
- AI Maturity Curve
- Adoption, Lifecycle Progression, Culture & Enablement
- Technical Depth Considerations

OpenAI Solution Part-2

- Customer Service Assistant
- Knowledge Assistants
- Digital Assistants
- Content Generation Solutions
- Moderation Solutions
- Build vs Buy
- Proven API Solution Patterns and Real-World Use Cases

Hands-On Lab

Building CustomGPT with Actions

- Get Your News API Key
- Create a New Custom GPT
- Configure GPT Actions
- Define OpenAPI Schema
- API Key Security
- Testing and Validation
- End-to-End GPT with Actions Implementation

Your course overview ends here.
But your cloud journey doesn't!

Unlock advanced training and certification pathways with **CloudThat**.



About CloudThat

Established in 2012, CloudThat is an award-winning company and the first in India to offer cloud training and consulting services for individuals and enterprises worldwide. Recently, it won Google Cloud's New Training Partner of the Year Award for 2025, becoming the first company in the world in 2025 to hold awards from all three major cloud giants: AWS, Microsoft, and Google. CloudThat notably won consecutive AWS Training Partner of the Year (APJ) awards in 2023 and 2024 and the Microsoft Training Services Partner of the Year Award in 2024, bringing its total award count to an impressive 12 awards in the last 8 years.

CloudThat specializes in Cloud Migration, Data Platforms, DevOps, IoT, and cutting-edge technologies like Gen AI & AI/ML. As a Microsoft Solutions Partner, AWS Premier Tier Training Partner, Google Cloud Platform Partner, and collaborator with leading organizations like HPE, Oracle, Nvidia and Databricks, CloudThat has trained over 850,000 professionals across 600+ cloud certifications, empowering students and professionals worldwide to advance their skills and careers.

To know more about our cloud certification training, email at sales@cloudthat.com or call us at **+91-8880002200** or **+1-8555588830** for those from outside India.