

Cisco AI Technical Practitioner Advanced (AITECHA)

Duration: 180 Days

The Cisco AI Technical Practitioner Advanced (AITECHA) Learning Path is an expert-level continuation of the Cisco AI Technical Practitioner (AITECH) Learning Path, designed for practitioners building production-grade agentic AI systems. The living domain-driven design structure ensures the curriculum evolves as the technology landscape changes. Through this Learning Path, you'll gain an understanding of the full engineering stack for production agentic AI systems. You will start by building a working agent from the ground up, learn to structure its outputs for reliable downstream integration, connect it to external tools via the Model Context Protocol (MCP), instrument and monitor it in production, give it memory and retrieval capabilities, and finally harden it against the security threats that come with autonomous tool use. Each course builds on the last—by the end you have the skills to design, deploy, and operate agents that are production-ready, not just demo-ready.

Skills You'll Learn:

- Build functional agentic AI systems from the ground up
- Structure agent outputs to ensure seamless and reliable downstream integration
- Connect agents to external tools using the Model Context Protocol
- Implement memory and retrieval capabilities to enhance agent performance
- Monitor and harden agents against security threats to ensure production-ready deployments

Learning Path Objectives:

Agentic AI Engineering: Build, deploy, and secure production-ready agentic AI systems by understanding the entire engineering stack, from fundamental agent development to advanced tool integration and security hardening.