



Cisco AI Technical Practitioner

What you will learn on this course

The Cisco AI Technical Practitioner (AITECH) training is designed for technical professionals seeking to transition from traditional knowledge-based work to innovation-driven roles augmented by Artificial Intelligence (AI). This comprehensive program equips you with the skills to effectively design technical solutions, automate tasks, and lead technical teams using cutting-edge AI tools and methodologies. From AI-powered code generation and data analysis to advanced model customization and workflow automation, this training prepares IT and network engineers, data analysts, AIOps specialists, solutions architects, technical leads, managers, and business process analysts to harness the full potential of AI within their organizations.

This training prepares you for the 810-110 AITECH v1.0 exam. If passed, you earn the AI Technical Practitioner certification. This training also earns you 8 Continuing Education (CE) credits toward recertification.

Course duration

- Instructor-led training: 2 days

How you will benefit

This training will help you:

- Transition from traditional knowledge-based work to innovation-driven roles by learning AI-augmented workflows and methodologies
- Gain hands-on expertise in advanced prompt engineering, AI-powered code generation, and multimodal asset creation (text, visual, and audio)
- Learn to evaluate AI platforms for enterprise readiness, analyze the economics of AI services, and architect deployments between cloud and local environments
- Acquire the skills to apply security frameworks that mitigate dataset bias, protect sensitive information, and neutralize AI-specific threats
- Gain the ability to automate complex tasks using APIs, optimize software engineering lifecycles, and design autonomous agentic systems
- Prepare for the 810-110 AITECH v1.0 exam

Who Should Attend

IT and Network Engineers
Data Analysts
AIOps Specialists
Solutions Architects
Technical Leads
Managers
Business Process Analysts

Course Objectives

- Describe common Generative AI models, tools, and practical workflows
- Apply a strategic framework to build a professional AI toolkit by evaluating platforms for enterprise readiness, analyzing AI service economics, and making the architectural decision between cloud and local deployment
- Explain the importance of effective prompts and apply basic techniques to craft and refine prompts for improved Generative AI outputs
- Develop multimodal business assets by utilizing generative AI tools to create and refine text, visual, and audio content
- Apply security frameworks and governance practices to mitigate dataset bias, protect sensitive data, and neutralize AI-specific threats
- Validate AI-generated outputs by identifying quality issues and biases, and applying specific techniques to correct those errors for professional use
- Construct complex, multi-step prompts by applying advanced methodologies to manage ambiguity and elicit specific LLM responses
- Apply generative AI tools to conduct research and synthesize information, and use AI as a catalyst for brainstorming
- Explain the fundamental role of APIs in AI systems and the principles of secure API usage
- Evaluate the impact of AI on software engineering workflows by analyzing its role in optimizing code quality, velocity, and lifecycle management
- Conduct exploratory data analysis and transformation by utilizing generative AI tools to clean datasets and generative insights
- Evaluate AI model customization strategies by differentiating between fine-tuning and RAG and analyzing local deployment architectures
- Design directive AI-powered workflows and describe the architecture of autonomous agentic systems

Course Outline

- Generative AI Ecosystem
- AI Architect's Toolkit
- Prompt Engineering for Technical Precision
- AI-Driven Multimodal Asset Creation
- Generative AI Security and Privacy Fundamentals
- Debugging and Correcting AI-Generated Outputs
- Advanced Prompting Strategies
- AI-Powered Discovery and Synthesis
- AI Systems Integration with APIs
- AI-Driven Software Engineering
- AI for Data Engineering and Exploration
- Customizing AI Models
- AI-Powered Workflows and Agentic AI

Prerequisites

There are no prerequisites for this training.