AI Solutions on Cisco Infrastructure Essentials (DCAIE)

Description

The **AI Solutions on Cisco Infrastructure Essentials (DCAIE)** training covers the essentials of deploying, migrating, and operating AI solutions on Cisco data center infrastructure. You'll be introduced to key AI workloads and elements, as well as foundational architecture, design, and security practices critical to successful delivery and maintenance of AI solutions on Cisco infrastructure.

This training also earns 34 Continuing Education (CE) credits toward recertification.

How you'll benefit

This training will help you:

- Gain the knowledge you need to deploy, migrate, and operate AI solutions on Cisco data center infrastructure
- Qualify for professional-level job data center roles
- Earn 34 CE credits toward recertification

Who should enroll

- Customers, Partners, and Internal Solutions Engineers who are ready to embark on designing and deploying AI solutions on Cisco infrastructure

Technology areas

- Data Center
- Artificial Intelligence (AI)

Objectives

- Have a basic knowledge of AI applications and use-cases
- Be aware of AI infrastructure compliance, governance, and sustainability
- Understand the AI workloads and the data center infrastructure requirements
- Understand different network architectures, mechanisms, and protocols for building AI fabrics
- Gain a broad knowledge of different compute and storage technologies used in building AI infrastructure

- Learn about different AI infrastructure provisioning automation options
- Understand different deployment options from security perspective
- Learn to properly maintain AI infrastructure, with focus on monitoring and troubleshooting

Prerequisites

There are no prerequisites for this training. This is an essentials training that progresses from beginner to intermediate content. Familiarity with Cisco data center networking and computing solutions is a plus but not a requirement.

Outline

- Fundamentals of AI
- Generative AI
- AI Use Cases
- AI-ML Clusters and Models
- AI Toolset Mastery - Jupyter Notebook
- AI Infrastructure
- AI Workload Placements and Interoperability
- AI Policies
- AI Sustainability
- AI Infrastructure Design Considerations
- Key Network Challenges and Requirements for AI Workloads
- AI Transport
- Connectivity Models
- AI Network
- Architecture Migration for AI/ML Networks
- Application-Level Protocols
- High Throughput Converged Fabrics
- Building Lossless Fabrics
- Congestive Visibility
- Data Preparation for AI
- AI/ML Workload Data Performance
- AI-Enabling Hardware
- Compute Resources
- Compute Resource Solutions
- Virtual Resources
- Storage Resources
- Setting Up AI Cluster
- Deploy and Use Open Source GPT Models for RAG

Link

- Cisco U. Learning Path