

AI Solutions on Cisco Infrastructure Essentials

(DCAIE) 1.0

Duration: 04 Days (32 HRS)

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.

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

Prerequisite

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. However, the knowledge and skills you are recommended to have before attending this training are:

- Cisco UCS compute architecture and operations

- Cisco Nexus switch portfolio and features
- Data Center core technologies

These skills can be found in the following Cisco Learning Offerings:

- [Introducing Cisco Unified Computing Systems \(DCIUCS\)](#)
- [Implementing Cisco NX-OS Switches and Fabrics in the Data Center \(DCNX\)](#)
- [Implementing Cisco Data Center Core Technologies \(DCCOR\)](#)

Course 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
- Key Network Challenges and Requirements for AI Workloads
- AI Transport
- Connectivity Models
- AI Network

- Architecture Migration to AI/ML Network
- 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

Lab Outline

- AI Toolset—Jupyter Notebook
- AI/ML Workload Data Performance
- Setting Up AI Cluster
- Deploy and Use Open Source GPT Models for RAG

Who Should Enroll

- Network Designers
- Network Administrators
- Storage Administrators
- Network Engineers
- Systems Engineers
- Data Center Engineers