

# AI Solutions on Cisco Infrastructure Essentials (DCAIE v1.0)

**Price:** 3495

**Duration:**

**Delivery Methods:** Virtual

## Overview

### Course Overview

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.

### Course Objectives

Describe key concepts in artificial intelligence, focusing on traditional AI, machine learning, and deep learning techniques and their applications

Describe generative AI, its challenges, and future trends, while examining the nuances between traditional and modern AI methodologies

Explain how AI enhances network management and security through intelligent automation, predictive analytics, and anomaly detection

Describe the key concepts, architecture, and basic management principles of AI-ML clusters, as well as describe the process of acquiring, fine-tuning, optimizing and using pre-trained ML models

Use the capabilities of Jupyter Lab and Generative AI to automate network operations, write Python code, and leverage AI models for enhanced productivity

Describe the essential components and considerations for setting up robust AI infrastructure

Evaluate and implement effective workload placement strategies and ensure interoperability within AI systems

Explore compliance standards, policies, and governance frameworks relevant to AI systems

Describe sustainable AI infrastructure practices, focusing on environmental and economic sustainability

Guide AI infrastructure decisions to optimize efficiency and cost

Describe key network challenges from the perspective of AI/ML application requirements

Describe the role of optical and copper technologies in enabling AI/ML data center workloads

Describe network connectivity models and network designs

Describe important Layer 2 and Layer 3 protocols for AI and fog computing for Distributed AI processing

Migrate AI workloads to dedicated AI network

Explain the mechanisms and operations of RDMA and RoCE protocols

Understand the architecture and features of high-performance Ethernet fabrics

Explain the network mechanisms and QoS tools needed for building high-performance, lossless RoCE networks

Describe ECN and PFC mechanisms, introduce Cisco Nexus Dashboard Insights for congestion monitoring, explore how different stages of AI/ML applications impact data center infrastructure, and vice versa

Introduce the basic steps, challenges, and techniques regarding the data preparation process

Use Cisco Nexus Dashboard Insights for monitoring AI/ML traffic flows

Describe the importance of AI-specific hardware in reducing training times and supporting the advanced processing requirements of AI tasks

Understand the computer hardware required to run AI/ML solutions

Understand existing AI/ML solutions

Describe virtual infrastructure options and their considerations when deploying

Explain data storage strategies, storage protocols, and software-defined storage

Use NDFC to configure a fabric optimized for AI/ML workloads

Use locally hosted GPT models with RAG for network engineering tasks

## Prerequisites

Course Prerequisites

There are no prerequisites for this training.

## Course Schedule

Date	Time	Price	Options
07/27/2026	09:00 AM - 05:00 PM CT	3,495.00	<a href="#">Buy Now</a> <a href="#">Enroll</a>

Date	Time	Price	Options
09/21/2026	09:00 AM - 05:00 PM CT	3,495.00	<a href="#">Buy Now</a> <a href="#">Enroll</a>

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Ten (10) business days' notice is required to reschedule a class with no additional fees. Notify TOPTALENT LEARNING as soon as possible at 469-721-6100 or by written notification to [info@toptalentlearning.com](mailto:info@toptalentlearning.com) to avoid rescheduling penalties.

### **How do I enroll for this class?**

Please contact our team at 469-721-6100; we will gladly guide you through the online purchasing process.

### **What happens once I purchase a class?**

You will receive a receipt and an enrollment confirmation sent to the email you submitted at purchase. Your enrollment email will have instructions on how to access the class. Any additional questions our team is here to support you. Please call us at 469-721-6100.

### **What is your late policy?**

If a student is 15 minutes late, they risk losing their seat to a standby student. If a student is 30 minutes late or more, they will need to reschedule. A no-show fee will apply. Retakes are enrolled on a stand-by basis. The student must supply previously issued courseware. Additional fees may apply.

### **What happens when I finish my class?**

You will receive a 'Certificate of Completion' once you complete the class. If you purchased an exam voucher for the class, a team member from TOPTALENT LEARNING will reach out to discuss your readiness for the voucher and make arrangements to send it.