

Cisco Certified Technician Supporting Cisco Data Center System Devices (DCTECH)

Course Duration: 8 Hours

Course code: DCTECH

1. Course Overview

The Cisco Certified Technician Supporting Cisco Data Center System Devices course is designed for field support engineers working with Cisco data center system devices and operating software. This course highlights the proper procedures for diagnosing and resolving common issues to improve the effectiveness of field support engineers and speed time-to-resolution.

2. What you'll learn?

After completing this course you should be able to:

- Review Cisco data center networking fundamentals, including Storage Area Networking (SAN), unshielded twisted-pair (UTP) and fiber connectors, the unified computing fabric, and server options
- Identify Cisco UCS component models, Cisco Nexus and MDS switches, accessories, cabling, and interfaces
- Understand Cisco UCS and Cisco Nexus Operating System (NX-OS) operating modes and identify commonly found software
- Use the Cisco GUI to connect and service Cisco UCS product components
- Demonstrate effective field servicing and equipment replacement, and how to troubleshoot most common issues with Cisco UCS servers
- Boost knowledge for protocols, solutions, and designs to acquire professional-level and expert-level data center roles

3. Target Audience

This course is intended for:

- Field support engineers and technicians
- Onsite engineers supporting Cisco UCS and data center hardware
- Individuals pursuing the Cisco Certified Technician Data Center (CCT Data Center) certification
- Support staff involved in hardware maintenance and TAC case handling

4. Course content

Module 1: Data Center Basics

- Introduction to Data Center Architecture
- Understanding Rack, Blade, and Modular Systems
- Power, Cooling, and Cabling Best Practices
- Server and Storage Connectivity Overview
- Data Center Networking Fundamentals
- Topologies and Redundancy Concepts

Module 2: Cisco Equipment and Related Hardware

- Overview of Cisco UCS Servers (B-Series, C-Series)
- Identifying Cisco Nexus Switches (2000 to 9000 Series)
- Front and Back Panel Component Identification
- Power Supplies, Fans, Line Cards, Fabric Interconnects
- Interface and Port Types (SFP, QSFP, Management Ports)
- LED Indicators and Status Interpretation

Module 3: Cisco UCS and Cisco NX-OS Software

- Introduction to Cisco Unified Computing System (UCS)
- UCS Manager and Intersight Overview
- Navigating UCS GUI and CLI
- UCS Profiles and Component Monitoring

- Introduction to Cisco NX-OS
- Using the NX-OS CLI for Basic Diagnostics
- File Management and Log Collection
- Software Versions and Upgrade Methods

Module 4: Service-Related Information

- Opening and Managing Cisco TAC Cases
- Collecting Required Information for Troubleshooting
- Using Cisco Diagnostic Tools and CLI Analyzer
- Locating Serial Numbers, PIDs, and Software Versions
- RMA Procedures and Documentation
- Performing Safe Replacements of Hardware
- Electrostatic Discharge (ESD) and Safety Protocols
- Final Testing and Customer Handoff