





# What you'll learn in this course

The Introducing Cisco Unified Computing System (DCIUCS) v1.0 is an introductory course that shows you how to deploy, secure, operate, and maintain the Cisco Unified Computing system (Cisco UCS®) B-Series blade servers, Cisco UCS C-Series and S-Series rack servers, and Cisco HyperFlex™ product family for use in data centers. You will gain hands-on practice on basic Cisco UCS server configuration, performing backup and restore activities, and more.

### Course duration

- Instructor-led training: 2 days in the classroom with hands-on lab practice
- Virtual instructor-led training: 2 days of web-based classes with hands-on lab practice
- E-learning: Equivalent of 2 days of instruction with videos, practice, and challenges

# How you'll benefit

This course will help you:

- Learn how to implement and maintain Cisco UCS servers
- Gain knowledge and skills through Cisco's unique combination of lessons and hands-on practice using enterprise-grade Cisco learning technologies, data center equipment, and software
- Prepare for data center job roles





## Who should enroll

- Server administrators
- Network engineers
- Systems engineers
- Consulting systems engineers
- Technical solutions architects
- Network administrators
- Storage administrators
- Network managers
- Sales engineers
- Cisco integrators and partners

### Technology areas

Data Center

### Course details

#### **Objectives**

After taking this course, you should be able to:

- Describe Cisco UCS server hardware
- Describe Cisco UCS connectivity
- Describe the Cisco HyperFlex Data Platform, its data writing and reading processes, and data optimization
- Describe and configure Cisco UCS service profiles
- Describe and configure Cisco UCS service profile templates
- Describe and implement Internet Small Computer Systems Interface (iSCSI) on Cisco UCS
- Describe and implement Cisco UCS firmware updates
- Describe and implement Cisco UCS backups

#### Recommended knowledge and training

To fully benefit from this course, you should have the following knowledge and skills:

- · General knowledge of servers
- · Routing and switching
- Storage area networking
- Server virtualization

These Cisco courses are recommended to help you meet these prerequisites:

- Implementing and Administering Cisco Solutions (CCNA®)
- Understanding Cisco Data Center Foundations (DCFNDU) v1.0
- Implementing and Operating Cisco Data Center Core Technologies (DCCOR)





#### **Outline**

- Describing Cisco UCS Server Hardware
  - o Cisco UCS B-Series Blade Servers
  - Cisco UCS C-Series Rack Servers
  - Cisco UCS S-Series Rack Servers
  - Cisco Virtual Interface Cards
  - o Hyperconvergence Overview
  - o Cisco HyperFlex HX-Series Servers
- Describing Cisco UCS Connectivity
  - o Cisco UCS Fabric Interconnect
  - Cisco UCS B-Series Connectivity
  - o Cisco UCS C-Series Connectivity
  - Cisco UCS S-Series Connectivity
  - o Cisco HyperFlex Connectivity Architecture
  - Cisco HyperFlex Edge Connectivity
  - Cisco UCS Fabric Interconnect Ethernet End-Host Mode Compared to Switching Mode
  - o Cisco UCS Fabric Interconnect Uplink Pinning
  - o Cisco UCS C-Series Integration
- Describing the Cisco HyperFlex HX Data Platform
  - o Cisco HyperFlex HX Data Platform Software
  - Writing Data to Cisco HyperFlex HX Data Platform
  - o Reading Data from Cisco HyperFlex HX Data Platform
  - o Data Optimization in Cisco HyperFlex HX Data Platform
- Configuring Cisco UCS Service Profiles
  - Portability Issue with Nonabstracted Identities
  - o Cisco UCS Service Profile
  - o Identity Pools
  - o Server Pools
  - o IP Pools
- Configuring Cisco UCS Service Profile Templates
  - o Service Profile Templates
- Implementing iSCSI on Cisco UCS
  - o iSCSI Addressing
  - o iSCSI Support in Cisco UCS
- Implementing Cisco UCS Firmware Updates
  - o Update Cisco UCS C-Series Server Firmware
  - o Download Tasks for the Infrastructure Image
  - Download Tasks for Cisco UCS B-Series Firmware Packages
  - o Best Practices for Updating Firmware in Cisco UCS Manager
  - o Firmware Upgrades Using Auto Install
  - Capability Catalog Updates
  - Host Firmware Packages
  - o Driver Updates for Operating Systems and Hypervisors
- Implementing Cisco UCS Backups
  - o Compare Backup Options in Cisco UCS Manager
  - o Compare Two Import Types
  - o Policy Backup

## How to enroll

To enroll in the DCIUCS course or explore our larger catalog of courses on Cisco Digital Learning, contact us at <training@fastlane-mea.com>

#### Lab outline

- Explore Cisco UCS Manager GUI
- · Configure Server and Uplink Ports
- Configure VLANs
- Configure Basic Identity Pools
- Configure a Cisco UCS Service Profile Using Pools
- Configure a Service Profile Template
- Configure an iSCSI Service Profile on Cisco UCS
- Perform Backup and Restore Activities



