

# **Designing and Implementing Cloud Connectivity (ENCC) 1.1**

Duration: 32 HRS

## **Description**

The **Designing and Implementing Cloud Connectivity (ENCC)** training helps you develop the skills required to design and implement enterprise cloud connectivity solutions. You will learn how to leverage both private and public internet-based connectivity to extend the enterprise network to cloud providers, such as Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform (GCP). You will explore the basic concepts surrounding public cloud infrastructure and how services like Software as a Service (SaaS), Direct Internet Access (DIA), and Cisco Umbrella can be integrated. You will practice how to analyze and recommend connectivity models that are scalable, resilient, secure, and provide the best quality of experience for users. You will learn to implement both Internet Protocol Security (IPsec) and Software-Defined Wide-Area Network (SD-WAN) cloud connectivity, as well as build overlay routing with Open Shortest Path First (OSPF) and Border Gateway Protocol (BGP). You will also implement control and data policies across the SD-WAN fabric and integrate Cisco Umbrella cloud security. Finally, you will practice troubleshooting cloud connectivity issues relating to IPsec, SD-WAN, routing, application performance, and policy application.

## **Prerequisite**

There are no prerequisites for this training. However, the knowledge and skills you are recommended to have before attending this training are:

- Good understanding of enterprise routing
- Good understanding of WAN networking
- Good understanding of VPN technology
- Good understanding of Cisco Catalyst SD-WAN
- Good understanding of Public Cloud services, such as AWS, Microsoft Azure, and GCP

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

- [Implementing and Administering Cisco Solutions \(CCNA\)](#)
- [Implementing and Operating Cisco Enterprise Network Core Technologies \(ENCOR\)](#)
- [Cisco SD-WAN Operation and Deployment \(SDWFND\)](#)

- [Implementing Cisco SD-WAN Security and Cloud Solutions \(SDWSCS\)](#)

## **Outline**

- Public Cloud Fundamentals
- Internet-Based Connectivity to Public Cloud
- Private Connectivity to Public Cloud
- SaaS Connectivity
- Resilient and Scalable Public Cloud Connectivity
- Cloud-Native Security Policies
- Regulatory Compliance Requirements
- Internet-Based Public Cloud Connectivity
- Overlay Routing Deployment
- Cisco SD-WAN Internet-Based Cloud Connectivity
- Cisco SD-WAN Cloud Security
- Cloud OnRamp for SaaS
- Cisco SD-WAN Policies
- Application Quality of Experience
- Internet-Based Public Cloud Connectivity Diagnostics
- Overlay Routing Diagnostics
- Cisco SD-WAN Public Cloud Connectivity Diagnostics

## **Who should attend**

- Cloud Architects
- Cloud Administrators
- Cloud Engineers
- Cloud Network Engineers
- Cloud Automation Engineers

- Cloud Systems Engineers
- Cloud Security Managers
- Cloud Consultants
- Cloud Application Developers
- Systems Engineers
- Technical Solutions Architects