



Train. Employ. Empower.

Cisco Certified DevNet Professional

Price
\$2,295.00

Duration
**5 Daytime Classes
Or
10 Evening Classes**

Delivery Methods
**Virtual, In-Person,
Private Group,**

Course Description:

CAREER SKILLS+™

This course is aimed at software developers and network engineers who want to advance their skills in network automation and programmability using Cisco's platforms and development tools. The training prepares participants for the Cisco Certified DevNet Professional certification by covering core concepts related to automation practices, application development, APIs, and tools used to develop applications and manage network environments effectively.

Certification Preparation:

Participants will be prepared for the Cisco Certified DevNet Professional certification exams, with a focus on both the core exam (DEVCOR) and one of the concentration exams of their choice.

Learning Mode: Hybrid (Instructor-Led and Self-Paced)

Duration: Varied, typically between 5-10 days of instructor-led training supplemented by extensive self-study.

Materials Provided: Digital courseware including developer tools, SDKs, and APIs documentation.

Who Should Attend

This course is designed for software developers, DevOps engineers, automation specialists, and other network professionals looking to specialize in network automation and programmability within Cisco environments.

Course Objectives

Automation Techniques: Learn advanced automation techniques using Python, Ansible, and Cisco-specific tools.

API Mastery: Deep dive into RESTful APIs, and Cisco's APIs for various platforms like SD-WAN, Meraki, and DNA Center.

Application Deployment: Understand the best practices for application deployment and security in network environments.

Network Programmability: Develop skills in network design programmability to manage complex network solutions.

Cloud Development: Gain insights into cloud development practices and how to integrate them with Cisco technologies.

Troubleshooting and Optimization: Learn to troubleshoot and optimize network applications and environments effectively.

Course Prerequisites

Required Certifications: Familiarity with software development, basic networking concepts, and prior experience with any programming language, preferably Python.

Technical Background: Participants should have at least one Cisco certification (like CCNA or DevNet Associate) or equivalent practical experience in a network or development role

Agenda

1. Lessons



Introduction to Network Automation
Python Programming for Network Engineers
Using Cisco APIs for Automation
Implementing Automation Tools (Ansible, Puppet)
Application Development and Deployment on Cisco
Platforms
Securing Applications and Automating Security Protocols
Integrating Cloud Services with Cisco Technologies
Advanced Data Handling and Analytics
DevOps Practices in Cisco Environments
Designing Scalable and Resilient Applications

2. Lab Outline

Setting Up Development Environments for Cisco
Automation
Programming with Cisco Network Services Orchestrator
(NSO)
Using Cisco Meraki APIs for Network Management
Automating Network Configurations with Ansible
Developing and Deploying Applications on Cisco DNA
Center
Securing Network Applications using Cisco Security Tools
Implementing Cloud Connectivity Solutions
Real-Time Data Analytics with Cisco Edge Intelligence
Case Study: Comprehensive Network Automation Project
Creating and Managing Continuous Integration/Continuous
Deployment (CI/CD) Pipelines