

Developing Applications Using Cisco Core Platforms and APIs (DEVCOR)

Modality: Virtual Classroom

Duration: 5 Days

CLC: 45 Units

About this Course:

The Developing Applications Using Cisco Core Platforms and APIs (DEVCOR) course helps you prepare for the Cisco DevNet Professional certification and for professional-level network automation engineer roles. You will learn how to implement network applications using Cisco® platforms as a base, from initial software design to diverse system integration, as well as testing and deployment automation. The course gives you hands-on experience solving real world problems using Cisco Application Programming Interfaces (APIs) and modern development tools.

To fully benefit from this course, you should have three to five years of experience designing and implementing applications that are built on top of Cisco platforms.

Course Objectives:

After completing this course you should be able to:

- Describe the architectural traits and patterns that improve application maintainability
- Describe the architectural traits and patterns that improve application serviceability
- Identify steps to design and build a ChatOps application
- Implement robust Representational State Transfer (REST) API integrations with network error handling, pagination, and error flow control
- Describe the necessary steps for securing user and system data in applications
- Describe the necessary steps for securing applications
- Identify common tasks in automated application release process
- Describe best practices for application deployment
- Describe methodologies for designing distributed systems
- Describe the concepts of infrastructure configuration management and device automation
- Utilize Yet Another Next Generation (YANG) data models to describe network configurations and telemetry
- Compare various relational and nonrelational database types and how to select the appropriate type based on requirements

Audience:

- This course is designed for anyone who performs or seeks to perform a developer role and

has one or more years of hands-on experience developing and maintaining applications that are built on top of Cisco platforms, as well as network engineers looking to expand their knowledge to include software and automation.

- This course covers specialized material about designing, developing, and debugging applications using Cisco APIs and platforms, and managing and deploying applications on Cisco infrastructure.

Prerequisites:

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

- Knowledge of program design and coding with focus on Python
- Familiarity with Ethernet, TCP/IP, and Internet-related networking
- Understand the utilization of APIs
- Understanding of software development and design methodologies
- Hands-on experience with a programming language (specifically Python)

Course Outline:

- Designing for Maintainability
- Designing for Serviceability
- Implementing ChatOps Application
- Describing Advanced REST API Integration
- Securing Application Data
- Securing Web and Mobile Applications
- Automating Application-Release
- Deploying Applications
- Understanding Distributed Systems
- Orchestrating Network and Infrastructure
- Modeling Data with YANG
- Using Relational and Non-Relational Databases