

**CCNAAUTO****Automating Networks Using Cisco Platforms**

40 horas

Profissional

Cisco

Cisco Continuing Education Credits

**48 CE Credits****INTRODUÇÃO**

The Automating Networks Using Cisco Platforms (CCNAAUTO) training teaches you how to implement basic network applications using Cisco platforms as a base, and how to implement automation workflows across network, security, collaboration, and computing infrastructure. The training gives you hands-on experience solving real-world problems using Cisco Application Programming Interfaces (APIs) and modern development tools.

This training prepares you for the 200-901 CCNAAUTO v1.1 exam. If passed, you earn the Cisco Certified Network Associate (CCNA) Automation certification. This training also earns you 48 Continuing Education (CE) credits toward recertification.

**How You'll Benefit**

This training will help you:

- Take advantage of the network when you implement applications to fulfill business needs
- Gain a foundation in the essentials of applications, automation, and Cisco platforms
- Prepare for the 200-901 CCNAAUTO v1.1 exam
- Earn 48 CE credits toward recertification

**OBJETIVO DO CURSO**

- Describe the importance of APIs and use of version control tools in modern software development
- Describe common processes and practices used in software development
- Describe options for organizing and constructing modular software
- Describe HTTP concepts and how they apply to network-based APIs
- Apply Representational State Transfer (REST) concepts to integration with HTTP-based APIs
- Describe Cisco platforms and their capabilities
- Describe programmability features of different Cisco platforms
- Describe basic networking concepts and interpret simple network topology
- Describe interaction of applications with the network and tools used for troubleshooting issues
- Apply concepts of model-driven programmability to automate common tasks with Python scripts
- Identify common application deployment models and components in the development pipeline
- Utilize tools to automate infrastructure through scripting and model-driven programmability
- Describe common security concerns and types of tests, and utilize containerization for local development

Network Automation Engineers, Software Developers, System Integration Programmers, Infrastructure Architects, Network Designers

## PRÉ-REQUISITOS

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

- Basic computer literacy
- Basic PC operating system navigation skills
- Basic Internet usage skills
- Hands-on experience with a programming language (specifically Python)

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

- Python Programming for Network Engineers (PRNE)

## CONTEÚDO PROGRAMÁTICO

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### Course Outline

Practicing Modern Software Development  
Describing Software Development Process  
Designing Software  
Introducing Network-Based APIs  
Consuming REST-Based APIs  
Introducing Cisco Platforms and APIs  
Employing Programmability on Cisco Platforms  
Describing IP Networks  
Relating Network and Applications  
Employing Model-Driven Programmability  
Deploying Applications  
Automating Infrastructure  
Testing and Securing Applications

### Lab Outline

Parse API Data Formats with Python  
Use Git for Version Control  
Inspect HTTP Messages  
Use Postman  
Utilize APIs with Python  
Use the Cisco Webex Collaboration API  
Perform Basic NETCONF Operations  
Construct Infrastructure Automation Workflow  
Construct a Python Unit Test  
Utilize Docker Commands  
Exploit Insufficient Parameter Sanitization