Programming for Network Engineers

Category: Networking & Security | **Vendor:** Cisco

Duration: 32.00 hours (4 days) **26.0 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

The Programming for Network Engineers (PRNE) v2.0 course is designed to equip you with fundamental skills in Python programming. Through a combination of lectures and lab experience in simulated network environments, you will learn to use Python basics to create useful and practical scripts with Netmiko to retrieve data and configure network devices. Upon completion of this course, you should have a basic understanding of Python, including the knowledge to create, apply, and troubleshoot simple network automation scripts.

This course will help you:

- Explain the need for network engineers to learn how to program
- Explain how programming relates to the journey into network automation and programmability
- Create useful and practical scripts to retrieve data and configure network devices
- Create, apply, and troubleshoot simple network automation scripts
- Gain hands-on experience with Python programming

About This Course

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Who Should Attend

This course is intended for:

- Network administrators
- Network engineers with little or no programming or Python experience
- Network managers
- Systems engineers

Prerequisites & Entry Requirements

General Prerequisites:

Before taking this course, you should have:

- Familiarity with Cisco IOS®-XE software or other Cisco network device configuration and operation skills
- Basic network management knowledge
- Cisco CCNA® certification or equivalent knowledge

The following Cisco courses can help you gain the knowledge you need to prepare for this course:

- Implementing and Administering Cisco Solutions (CCNA)

Learning Outcomes

Upon successful completion of this course, participants will be able to:

After taking this course, you should be able to:

- Create a Python script
- Describe data types commonly used in Python coding
- Describe Python strings and their use cases
- Describe Python loops, conditionals, operators, and their purposes and use cases
- Describe Python classes, methods, functions, namespaces, and scopes
- Describe the options for Python data manipulation and storage
- Describe Python modules and packages, their uses, and their benefits
- Explain how to manipulate user input in Python
- Describe error and exception management in Python
- Describe Python code debugging methods

Detailed Course Outline

- Introducing Programmability and Python for Network Engineers
- Scripting with Python
- Examining Python Data Types
- Manipulating Strings
- Describing Conditionals, Loops, and Operators
- Exploring Classes, Methods, Functions, Namespaces, and Scopes
- Exploring Data Storage Options
- Exploring Python Modules and Packages
- Gathering and Validating User Input
- Analyzing Exceptions and Error Management
- Examining Debugging Methods
- Course Summary

Skills You Will Learn:

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Frequently Asked Questions

Q: What delivery options are available for Programming for Network Engineers?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: How many CPD hours does this course provide?

The 4-day Programming for Network Engineers course provides up to 26.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Programming for Network Engineers training?

The training takes place over 4 day(s), with each day lasting approximately 32.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Programming for Network Engineers?

Yes, we provide corporate training, dedicated training, and closed classes for Programming for Network Engineers. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Programming for Network Engineers, Cisco Networking, PRNE

Q: Why choose Nexus Human for Programming for Network Engineers?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Programming for Network Engineers training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

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