

# Cisco NSO Essentials for Programmers and Network Architects (NSO201) v4.0

**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 Cisco NSO Essentials for Programmers and Network Architects (NSO201) v. 4.0 course introduces you to Cisco® Network Services Orchestrator (NSO). You will learn to install Cisco NSO and use it to manage devices and create services based on YANG templates with XPath. This course provides an overview of NSO as a network automation solution, as well as introductions to NETCONF, YANG, and XPath. You will learn about managing devices and creating device templates, service management and service package creation, network element drivers, interfacing with other systems using APIs, configuring and troubleshooting system settings, managing alarms and reporting, configuring NSO for scalability and performance, and capabilities that can be added to Cisco NSO.

## About This Course

The Cisco NSO Essentials for Programmers and Network Architects (NSO201) v. 4.0 course introduces you to Cisco® Network Services Orchestrator (NSO). You will learn to install Cisco NSO and use it to manage devices and create services based on YANG templates with XPath. This course provides an overview of NSO as a network automation solution, as well as introductions to NETCONF, YANG, and XPath. You will learn about managing devices and creating device templates, service management and service package creation, network element drivers, interfacing with other systems using APIs, configuring and troubleshooting system settings, managing alarms and reporting, configuring NSO for scalability and performance, and capabilities that can be added to Cisco NSO.

## Who Should Attend

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System installers

System integrators

System administrators

Network administrators

Solutions designers

# Learning Outcomes

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

After completing this course, you should be able to:

Explain transactional service activation and how it relates to business requirements

Explain the benefits and uses of Cisco NSO

Explain how Cisco NSO communicates with network devices

Understand the NETCONF protocol and be able to read and write simple YANG models

Install NSO and describe how NSO uses NETCONF and the Device Manager component

Understand the difference between devices that are fully NETCONF capable and those that are less or not NETCONF capable

Explain the YANG service model structure

Describe how YANG is used with NSO, create and deploy a service, and explain NSO FASTMAP

Design and manage services with YANG models

Perform NSO configuration and basic troubleshooting, and describe the following NSO features:

integration options, alarms and reporting, scalability and performance options, and available function packs

Use logs to troubleshoot the Cisco NSO deployment and check NSO communication with network devices

Explain the mapping logic of service parameters to device models and consequently to device configurations

Describe the use of different integration options and APIs

Explain the use of Reactive FASTMAP for manipulating and implementing advanced Network Functions Virtualization (NFV) components

Describe the use of feature components and function packs

Define and explain the European Telecommunications Standards Institute (ETSI) Open Source NFV Management and Orchestration (MANO) principles and solution

Work with the alarm console, and understand the NSO alarm structure and how it conforms to modern network operations procedures

## Additional Course Details

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Nexus Humans Cisco NSO Essentials for Programmers and Network Architects (NSO201) v4.0 training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the Cisco NSO Essentials for Programmers and Network Architects (NSO201) v4.0 course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

# Frequently Asked Questions

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## **Q: What delivery options are available for Cisco NSO Essentials for Programmers and Network Architects (NSO201) v4.0?**

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
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## **Q: How many CPD hours does this course provide?**

The 4-day Cisco NSO Essentials for Programmers and Network Architects (NSO201) v4.0 course provides up to 26.0 CPD hours of structured learning. CPD certificates can be provided upon request.

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## **Q: What is the duration of the Cisco NSO Essentials for Programmers and Network Architects (NSO201) v4.0 training?**

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

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## **Q: Do you provide corporate training for Cisco NSO Essentials for Programmers and Network Architects (NSO201) v4.0?**

Yes, we provide corporate training, dedicated training, and closed classes for Cisco NSO Essentials for Programmers and Network Architects (NSO201) v4.0. 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.

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## Q: Why choose Nexus Human for Cisco NSO Essentials for Programmers and Network Architects (NSO201) v4.0?

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

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## Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Cisco NSO Essentials for Programmers and Network Architects (NSO201) v4.0 training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

# Nexus Human

## Professional Training & Development

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