



# Cisco NCS 2000 Series Deploying 96-Channel Flex Spectrum (OPT201)

ID OPT201 Price on request Duration 3 days

### **Course Overview**

The Cisco NCS2000 Deploying 96-Channel Flex Spectrum (OPT201) v3.0 course shows you how to plan, configure, and control optical networks using the Cisco® Network Convergence System (NCS) 2000 series Flex Spectrum platform.

The course teaches you how to design Flex Spectrum networks with multi-degree Reconfigurable Optical Add-Drop Multiplexer (ROADM) multi-shelf nodes using the Cisco Transport Planner (CTP) software.

You'll learn how to:

- Install the Cisco NCS 2000 series hardware
- Configure an optical network and circuits using the Cisco Transport Controller (CTC) software
- Learn which components and configurations take advantage of and/or are required for the Flex Spectrum 96-channel feature
- Configure optical networks with multidegree ROADM multishelf nodes
- Configure optical networks with colorless, contentionless, omnidirectional, and MPO cross-connect advanced features
- Describe and configure the NCS 2000 400-Gbps Xponder line card

# How you'll benefit

This class will help you:

- Gain an in-depth understanding of how to install, deploy, and maintain a Cisco Optical Networking Services (ONS) 15454 Multiple Spanning Tree Protocol (MSTP) network
- Practice what you learn through hands-on labs

# Who should attend

This course is designed for technical professionals who need to know how to deploy a Cisco NCS 2000 Series Dense Wavelength-Division Multiplexing (DWDM) network with Flex Spectrum.

The primary audience for this course includes:

- Designers
- · Systems engineers and implementation staff
- Network operations center personnel
- Technical support personnel who are involved with the deployment, operations, and maintenance of the Cisco NCS 2000 Series
- · Channel partners and resellers

# **Prerequisites**

To fully benefit from this course, you should first complete the Cisco Fundamentals of Fiber Optics Technology (FFOT) video training course, or have an equivalent level of knowledge and skills.

# **Course Objectives**

After taking this course, you should be able to:

- Describe the hardware and components required and used with the Flex Spectrum feature
- Design optical networks in the Cisco Transport Planner software
- Install the hardware, including multishelf nodes
- Perform node turn-up and create circuits using the Cisco Transport Controller software
- Configure optical networks with multidegree ROADM multishelf nodes
- Configure optical networks with colorless, contentionless, omnidirectional, and MPO cross-connect advanced features
- Describe and configure the NCS 2000 400-Gbps Xponder line card
- · Add a node to an existing DWDM ring





- Describe the NCS 2000 Troubleshooting Guide
- Use the features and documentation with Transport Controller to perform maintenance, testing, and basic troubleshooting

# **Detailed Course Outline**

- DWDM and Flex Spectrum Foundation
- NCS 2000 Chassis and Cards
- Design ROADM Networks with CTP
- Hardware Installation and Multishelf
- Node Turn-Up and Circuit Creation
- Advanced Feature Networks and Circuits
- Testing, Maintenance, and Basic Troubleshooting
- Spectrum Switched Optical Network

# About Fast Lane



Fast Lane is a global, award-winning specialist in technology and business training as well as consulting services for digital transformation. As the only global partner of the three cloud hyperscalers- Microsoft, AWS and Google- and partner of 30 other leading IT vendors, Fast Lane offers qualification solutions and professional services that can be scaled as needed. More than 4,000 experienced Fast Lane professionals train and advise customers in organizations of all sizes in 90 countries worldwide in the areas of cloud, artificial intelligence, cyber security, software development, wireless and mobility, modern workplace. as well as management and leadership skills, IT and project management.

# **Fast Lane Services**

- ✓ High End Technology Training
- ✓ Business & Soft Skill Training
- ✓ Consulting Services
- ✓ Managed Training Services
- ✓ Digital Learning Solutions
- ✓ Content Development
- ✓ Remote Labs
- ✓ Talent Programs
- ✓ Event Management Services

















- ✓ Instructor-Led Online Training
- ✓ FLEX Classroom Classroom &
- Online Hybrid
- ✓ Onsite & Customized Training
- ✓ E-Learning
- ✓ Blended & Hybrid Learning
- ✓ Mobile Learning



servicenow.



AUTHORIZED





Authorized

F#RTINET.





opentext\*



# Technologies & Solutions

- ✓ Digital Transformation
- ✓ Artificial Intelligence
- ✓ Cloud
- ✓ Networking
- ✓ Cyber Security
- ✓ Wireless & Mobility
- ✓ Modern Workplace
- ✓ Data Center























# Worldwide Presence

with high-end training centers around the globe



# **Multiple Awards**

from vendors such as AWS, Microsoft, Cisco, Google, NetApp, **VMware** 



# **Experienced SMEs**

with over 19.000 combined certifications

## Germany

Fast Lane Institute for Knowledge Transfer GmbH

Tel. +49 40 25334610

info@flane.de / www.flane.de

# Austria

**ITLS GmbH** 

(Partner of Fast Lane) Tel. +43 1 6000 8800

info@itls.at / www.itls.at

# **Switzerland**

Fast Lane Institute for Knowledge Transfer (Switzerland) AG

Tel. +41 44 8325080

info@flane.ch / www.flane.ch