Cisco Optical Technology Intermediate (OPT200)

This is a Cisco Learning Services course and is delivered directly by Cisco.

Course Overview

The **Cisco Optical Technology Intermediate (OPT200) v3.0** course is designed to teach you the skills necessary to deploy the Cisco® Optical Networking System (ONS), 15454 Multiservice Transport Platform (MSTP), and Cisco Network Convergence System (NCS) 2000 Series Dense Wavelength-Division Multiplexing (DWDM) networks from installation to protection. Through a combination of lecture and hands-on experience, you will learn installation, configuration, circuit protection, maintenance, and basic troubleshooting using the Cisco Transport Controller for the Cisco ONS 15454 M6 and M12 shelves, and for the Cisco NCS 2016 shelf.

Additionally, in this course you will review DWDM terminology and components, explore available chassis and cards, and discuss hardware installation. You will learn to use the Cisco Transport Controller server software to connect to the nodes, perform network turn-up and circuit creation, and deploy linear and single-module ROADM (SMR) DWDM multishelf topologies. Using this software, you will also configure Raman amplifiers and Any Rate cards, and configure protected and unprotected circuits. The course covers a variety of card options: controllers, transponders, multiplexer-demultiplexer, add/drop, Raman amplifiers, and Cisco Any Rate muxponder cards. You will use the various cards to configure terminal, amplifier, mesh, split, Optical Service Channel (OSC) regenerator, and Reconfigurable Optical Add/Drop Multiplexing (ROADM) nodes. Finally, you will learn how to use many of the tools and features available with the Cisco Transport Controller to perform maintenance, testing, and basic troubleshooting of your optical network.

This course will help you:

- Deploy, maintain, test, and troubleshoot your optical network
- Explain Cisco DWDM platform basics, DWDM network topologies, and the Cisco DWDM network management software
- Expand and deepen your knowledge of optical networks and their maintenance
- Identify the uses of the Cisco Transport Controller
- Describe and utilize various optical network technologies

Who should attend

This course is intended for:

- System engineers
- Technical support personnel
- Channel partners and resellers

Prerequisites

Before taking this course, you should have:

- Basic knowledge of optical transport and protocols
- Familiarity with data networking principles

This Cisco recommended course may help you meet these prerequisites:

- Understanding Cisco Service Provider Network Foundations (SPFNDU)

Course Objectives

After taking this course, you should be able to:

- Describe Cisco DWDM platform basics
- Describe DWDM network topologies
- Describe the management software used for managing Cisco DWDM networks
- List the different hardware components of the Cisco ONS and Cisco NCS DWDM systems
- Provision nodes and circuits in a Cisco DWDM network
- Perform node and multishelf configurations
- Implement SMR-based rings
- Provision optical circuit protection mechanisms

- Configure Any Rate cards
- Describe the function of Raman amplifiers
- Perform basic maintenance and troubleshooting of a Cisco DWDM network

Detailed Course Outline

- DWDM Optical Platform Foundation
- Chassis and Cards
- Hardware Installation
- Node Turn-Up and Circuit Creation
- Node and Multishelf Configurations
- SMR-Based Rings
- 10Gb Circuit Protection
- Any Rate Card Configuration
- Raman Amplifiers
- Maintenance and Basic Troubleshooting

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

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

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