Cisco Optical Technology Intermediate (OPT200)

Course Outline

- DWDM Optical Platform Foundation
- Introducing DWDM Terminology and Components
- Exploring DWDM Network Topologies
- o Introducing the Management Software and Documentation
- Using Functional View
- Chassis and Cards
- o Investigating Chassis and Common Equipment
- Exploring Controller Cards and the OSC
- o Exploring Add/Drop (Multiplexer/Demultiplexer) Cards
- Exploring Transponder Cards
- Exploring Muxponder and Crossponder Cards
- Exploring Client Port Modules
- Exploring Amplifier Cards
- Exploring Tunable Dispersion Compensator Cards, PSM Cards, and Passive Auxiliary Modules
- Hardware Installation
- o ONS 15454 MSTP Equipment to Rack Mount
- o 15454 M12 Shelf Installation
- 15454 M6 Shelf Installation
- o NCS 2000 Series Equipment to Rack Mount
- o NCS 2015 Shelf Installation
- Intrashelf Fiber Connections
- Node Turn-Up and Circuit Creation
- o Performing Node Turn-Up in Cisco Transport Controller
- Creating OCHNC Circuits
- Creating an OCHCC Circuit
- Node and Multishelf Configurations
- Exploring DWDM Node Configurations
- Configuring Multishelf Nodes
- SMR-Based Rings
- o SMR-Based ROADM Configurations
- o 4-Degree Mesh Using SMR2
- Viewing SMR-Based Ring Power Levels
- 10Gb Circuit Protection
- Exploring 10Gb Circuit Protection Options
- Investigating Client Protection with Two Signals
- o Configuring Circuit Protection with a Y-Cable
- Configuring Circuit Protection with Protected Transponders
- Configuring Circuit Protection with PSMs

- Any Rate Card Configuration
- o Exploring AR MXP/XP Card Features
- o Investigating Card Modes
- Exploring Mixed Mode Scenarios
- Provisioning a Cisco Transport Controller AR_XP Example
- Raman Amplifiers
- o Introducing Raman Amplifier Theory of Operation
- o Cabling the RAMAN-CTP and -COP Cards o Connecting Raman Nodes for Communication
- Examining Installation Requirements
- o Executing the Raman Day 0 Tune Wizard
- Maintenance and Basic Troubleshooting
- o Exploring Network Maintenance Features
- o Exploring Node Maintenance Features
- Exploring Shelf Maintenance Features
- o Exploring Card Maintenance and Performance Features
- o Upgrading Shelves to Release 10.6.2
- o Installing and Managing Licenses
- o Performing Basic Troubleshooting