

## HCIA-Access

**Duration: 5 Days**    **Course Code: HCIA-PON**

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### Overview:

The course introduces SDH Principles, MSTP System Overview, MSTP Protection Schemes, Service Configuration of MSTP, Ethernet Principles, Ethernet Service Overview, WDM Principles and OTN Protocols.

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### Target Audience:

- Personnel who are going to take HCIA-Transmission exam
  - Personnel who expect to learn about basic optical transmission principles and Huawei SDH equipment operation
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### Objectives:

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| ■ On completion of this program, the participants will be able to: | ■ Explain the protection mechanism of MSP/SNCP                               |
| ■ Describe SDH working principle                                   | ■ Explain the system structure and features of the OptiX OSN 3500 equipment  |
| ■ Describe WDM working principle                                   | ■ State the main functions of the boards in the OptiX OSN 3500 equipment     |
| ■ Describe OTN working principle                                   | ■ Accomplish the SDH network configuration and monitoring through NMS        |
| ■ Describe Ethernet working principle                              | ■ Accomplish the PDH service configuration through NMS                       |
| ■ Describe the basic concept of MPLS and PWE3                      | ■ Accomplish the Ethernet service (EPL/EVPL/EPLAN) configuration through NMS |
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### Prerequisites:

- Having a general knowledge of telecommunications
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## Content:

### SDH Principles(HC)

- SDH Overview
- SDH Frame Structure and Multiplexing
- SDH Overhead and Pointers
- Logical Function Modules
- Networking and Protection

### SDH Principles(Manual)(HC)

### MSTP System Description(HC)

- System Overview
- Cabinets and Subracks
- Boards
- Hardware Configurations
- Functions and Features

### MSTP Protection Principles(HC)

- Linear MSP
- Two-Fiber MSP Rings
- Four-Fiber MSP Rings
- SNCP

### Ethernet Technologies(HC)

- Overview of LAN
- Ethernet Principles
- About Ethernet QoS
- Overview of EoS
- Overview of VLAN

### Ethernet Technologies(Manual)(HC)

#### Ethernet Services and Networking Applications(HC)

- Ethernet Terms
- Ethernet Service Types: EPL,EVPL, EPLAN, EVPLAN
- Ethernet Service Configurations

### iManager U2000 System Description(HC)

- System Structure and Major Features of U2000
- Major Functions of U2000
- Commissioning Procedures for Single Station

### HCIA-Transmission Lab Practice Guide(HC)

- Linear MSP Configurations
- Two-Fiber MSP Rings Configurations
- Four-Fiber MSP Rings
- SNCP Configurations
- Per-NE Service Configurations
- Path-Specific Service Configurations
- Ethernet Service Configurations

### WDM Principles(HC)

- Overview of WDM
- Key WDM Technologies
- ITU-T Compliance

### WDM Principles(Manual)(HC)

### OTN Principles(HC)

- Overview of OTN
- OTN Interface Structure
- Mapping and Multiplexing of OTN
- OTN Overhead
- OTN Trail Layers and Maintenance Signals
- Common OTN Alarms

### OTN Principles(Manual)(HC)

- Training Methods
- Lecture, Hands-on exercise

## Further Information:

For More information, or to book your course, please call us on 00 971 4 446 4987

[training@globalknowledge.ae](mailto:training@globalknowledge.ae)

[www.globalknowledge.com/en-ae/](http://www.globalknowledge.com/en-ae/)

Global Knowledge, Dubai Knowledge Village, Block 2A,First Floor, Office F68, Dubai, UAE