

## HCIA-Access Training

Last Update:2019-01-03

### Target Audience

- Those who wish to become an access network associate
- Those who hope to obtain HCIA certification

### Prerequisites

- Those who have obtained the same level technical certificate in the industry, and hope to obtain Huawei certificate.

### Objectives

- On completion of this program, the participants will be able to:
- Outline the functions of TCP/IP, routing and VLAN forwarding process, can apply TCPIP working principles to data forwarding
- Outline GPON typical application scenarios, key GPON components, upstream and downstream technology
- Outline the key performance parameters on distance, bandwidth, optical launched power, received sensitive power, attenuation, etc.
- Outline the function and structure of cabinet, frames, boards and cables
- Perform GPON FTTH/B/C HSI and VoIP service configuration, maintenance and verification
- Master the PPP/PPPoE, DHCP, SIP protocols
- Master the basics of NMS

### Duration

- 5 working days

### Content

- Module 1 - Access Network Overview
  - Concepts of the Access Network
  - Typical Scenarios and Technologies of Traditional Access
  - Advantages and Typical Application Scenarios of PON
- Module 2 - IP Network Technologies Fundamental
  - Function of TCP/IP each layer
  - VLAN Technology Principles
  - Route Basics
- Module 3 - GPON and xDSL principles
  - GPON networking, GPON component, GPON upstream and downstream implementation, GPON key technologies, GPON protection
  - xDSL Technology Fundamental
- Module 4 - Broadband service
  - PPP and PPPoE protocol

- DHCP protocol
- Module 5 - VoIP service
  - VoIP introduction
  - SIP protocol
- Module 6 - FTTx System Overview
  - FTTx network devices introduction
  - Typical OLT devices
  - Typical MxU devices
  - Typical ONT devices
- Module 7 - Access Network Basic Operation and Maintenance
  - OLT basic operation
  - GPON/xDSL Broadband Service Provisioning and Configurations
  - GPON Voice Service Provisioning and Configurations
- Module 8 - ODN Link Detection Guide
  - ODN and ODN Product Description
  - Introduction to the ODN Link Detection Tool and Parameters
  - ODN Engineering Construction Detection
  - ODN Service Provisioning and O&M Detection
- Module 9 - NMS basics
  - SNMP protocol introduction
  - U2000 introduction
  - eSight introduction