



COURSE OUTLINE

Course Code: HCSE-Presales-Campus Planning and Design V1.0

Course Code: HW-HCSE-CNP&D

DURATION	SKILL LEVEL	DELIVERY METHOD	TRAINING CREDITS	TECHNOLOGY
5 Day(s)	Professional	VILT / In Person Theoretic teaching + Hands-on practice	Huawei Voucher	IP Network

Course Overview

The HCSE-Presales-Campus Planning and Design V1.0_EN course provides presales professionals with the knowledge required to position, plan, and design Huawei campus network solutions. The course covers WLAN key technologies, office campus network technologies, multi-branch WAN interconnection, industrial campus scenarios, campus network management and O&M, SD-WAN solution design, iMaster NCE-Campus, and Xinghe Intelligent Campus Network design guidance for small-, medium-, and large-sized campus environments using VLAN, VXLAN, and multi-branch WAN architectures.

Prerequisites

- None
- Recommended basic understanding of IP networking, switching, routing, WLAN, and enterprise campus network concepts.

Target Audience

- Personnel who want to become Campus Network pre-sales engineers.
- Personnel who want to obtain HCSE-Presales-Campus Network Planning and Design certification.
- Personnel who want to sell Huawei Campus Network products and satisfy customer requirements.

Course Content

1. Technical Fundamentals and Applications of WLAN

- 1.1 Key WLAN Technologies
- 1.2 WLAN Networking Design
- 1.3 Typical WLAN Networking
- 1.4 WLAN Application Scenarios

2. Technical Fundamentals and Applications of Office Campus Networks

- 2.1 Terminal Access Technologies
- 2.2 Egress Network Technologies
- 2.3 Network Virtualization Technologies
- 2.4 Experience Assurance Technologies
- 2.5 IPv6 Technologies

3. Technical Fundamentals and Applications of Multi-Branch WAN Interconnection

- 3.1 GRE
- 3.2 IPsec
- 3.3 MPLS VPN
- 3.4 BGP EVPN

4. Key Technical Principles and Applications in Industrial Scenarios

- 4.1 High-Quality 10 Gbps Industrial Campus Network: Solution Overview
- 4.2 High-Quality 10 Gbps Industrial Campus Network: Key Technologies
- 4.3 High-Quality 10 Gbps Industrial Campus Network: Typical Networking

5. Key Technologies for Campus Network Management and O&M

- 5.1 Technical Principles and Application of SNMP
- 5.2 Technical Principles and Application of NETCONF and YANG
- 5.3 Technical Principles and Application of Telemetry
- 5.4 Technical Principles and Application of sFlow and NetStream
- 5.5 Technical Principles and Application of iPCA
- 5.6 Application of the Northbound Technologies of the SDN controller

6. Huawei Campus SD-WAN Products and Solutions

- 6.1 Development Trends and Challenges of WAN Interconnection
- 6.2 Overview of Huawei SD-WAN Solution
- 6.3 Introduction to Huawei NetEngine AR Products

7. Huawei iMaster NCE-Campus — Campus Network Management System

- 7.1 Digital Transformation Trends and Challenges
- 7.2 iMaster NCE-Campus Overview
- 7.3 Automatic Network Planning
- 7.4 Automatic Network Construction
- 7.5 Automatic Network O&M
- 7.6 Diverse Deployment Modes

8. Huawei Xinghe Intelligent Cloud Managed Campus Network Design Guide for Small and Midsize Enterprises

- 8.1 Xinghe Intelligent Cloud Managed Campus Solution Overview
 - 8.2 Requirement Survey and Analysis
 - 8.3 Network Architecture Design
 - 8.4 Simplified Deployment Design
 - 8.5 IP Service Design
 - 8.6 Wireless Network Design
 - 8.7 Access Control Design
 - 8.8 Network Security Design
 - 8.9 Experience Assurance Design
 - 8.10 O&M Management Design
 - 8.11 VAS Design
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9. Huawei Xinghe Intelligent Large- and Medium-Sized Campus Network Design Guide (VLAN Networking)

- 9.1 Network Architecture Design
- 9.2 Wired Network Service Design
- 9.3 Wireless Network Service Design
- 9.5 Network Security Service Design
- 9.6 Ultimate Service Experience Design
- 9.7 Intelligent O&M Management Design
- 9.8 Multi-Campus Network Interconnection Solution Design

10. Huawei Xinghe Intelligent Campus Solution for Large- and Medium-Sized Networks (Virtualization Scenario) Design Guide

- 10.1 Huawei Xinghe Intelligent Campus Solution (VXLAN Scenarios)
- 10.2 Fabric Architecture Design
- 10.3 Fabric Underlay & Overlay Network Service Design
- 10.4 Fabric Wireless Network Design
- 10.5 Terminal Access Control and Free Mobility Design
- 10.6 Network Security Service Design
- 10.7 Ultimate Service Experience Design
- 10.8 Intelligent O&M Design
- 10.9 Multi-Fabric Campus Network Interconnection Solution Design

11. Huawei Xinghe Intelligent Campus Network Multi-Branch WAN Interconnection Solution Design Guide

- 11.1 Development Trends and Challenges Facing Enterprise WAN Interconnection
- 11.2 Overview of Huawei's SD-WAN Solution
- 11.3 Networking Design for Huawei's SD-WAN Solution
- 11.4 Service Design for Huawei's SD-WAN Solution
- 11.5 Reliability and Security Design for Huawei's SD-WAN Solution

ASSOCIATED CERTIFICATION AND EXAM:

The HCSE-Presales-Campus Network Planning and Design V1.0 written exam covers export knowledge of Huawei Campus Network solution; technical fundamentals and applications of office campus networks, multi-branch WAN interconnection, industrial scenarios, campus network management and O&M; design guide of different kind of campus network

You need to pass the following exam to obtain the certificate.

Exam Code	Certification Exam
H19-404	HCSE-Presales-Campus Network Planning and Design (ENU)

HCSE-Presales-Campus Network Planning and Design (ENU)

Exam Code: H19-404

Exam Type: Written examination

Exam Format: Single-answer Question, Multiple-answer Question, True or false

Time: 90 minutes

Passing Score/Total Score: 600/1000