

Course Outline



Course Name: Presales-IP-Network

Course Code: HW-HCSA-IPNW

DURATION	LEVEL	TECHNOLOGY	DELIVERY METHOD	TRAINING CREDITS
5 Days	Pre-Sales	IP Networks	VITL/In Class	Huawei Learning Vouchers

Introduction

The Huawei Certified Specialist Associate (HCSA): Presales-IP Network certification course version 4.0, is a comprehensive course designed to equip participants with the essential knowledge and skills required for the pre-sales, design, and implementation of Huawei's IP network products and solutions. Through this program, students will gain in-depth insights into Huawei's cutting-edge technologies, including CloudCampus solutions, campus and data center switches, WLAN products, SD-WAN solutions, CloudWAN products, and network security solutions, including Hisec. Additionally, participants will explore fundamental business functions, network architecture, and the basic configuration and deployment of Huawei IP products. The course also covers the SCT guide and delves into typical application scenarios, empowering students to effectively address customer needs and design tailored solutions using Huawei's IP datacom products.

Target Audience

This course is intended for individuals who want to become and certify as IP Network pre-sales engineers, for individuals who are engaged in selling Huawei products and solutions to satisfy customer requirements.

Prerequisites

- Possess basic knowledge of IP networks (OSI / TCP/UDP/IP and common ethernet technologies)
- Familiar with common network devices of data communication
- Familiar with Huawei Enterprise IP network products, including: Switches, WLAN, Routers, Security etc.
- Recommended that delegates attending have access to Huawei's eDesigner and SCT platforms prior to attending the course.

Course Objectives

- On completion of this course, participants should be able to:
- Describe the basic concepts and end-to-end (E2E) networking architecture of data communication networks.
- Distinguish common data communication network devices.
- Understand the scenario classifications and basic concepts of data communication network solutions.
- Describe the basic concepts, typical architectures, and typical application scenarios of campus networks, wireless local area networks (WLANs), data center networks (DCNs), wide area networks (WANs), and network security.
- Gain insight into Huawei's solutions in each scenario.
- Describe the concept of a campus network and its position on an end-to-end (E2E) large-scale network
- Distinguish between different types of campus networks and describe their main characteristics.
- Describe the typical logical and physical architectures of campus networks.
- Describe the architecture, components, and main functions of Huawei High-Quality 10 Gbps Campus Network Solution
- Recommend a proper campus network architecture based on customer requirements.
- Differentiate between Huawei switch models and flexibly select them for different projects
- Understand the WLAN and its relationship with Wi-Fi.
- Have a good command of WLAN architectures and various networking modes.
- Understand the features of Huawei WLAN products and solutions.
- Be familiar with the models and highlights of Huawei WLAN products.
- Master the differences between Huawei WLAN product models and flexibly select specific models based on project requirements.
- Understand the WAN development process and what SD-WAN is.
- Be familiar with the features of Huawei SD-WAN products and solutions.
- Be familiar with the models and highlights of Huawei NetEngine AR products.
- Be familiar with the differences between Huawei NetEngine AR models and flexibly select specific AR models based on project requirements.
- Describe the basic architecture of a DCN.
- Have general knowledge of Huawei Ultra-Resilient Multi-DC Network Solution, and Huawei Computing Network Solution.
- Understand Huawei's CloudEngine DC switches and their deployment scenarios.
- Describe the concepts of an enterprise WAN and its position on an end-to-end (E2E) large-scale network.
- Describe the typical logical and physical architectures of an enterprise WAN.
- Describe the architecture, components, and main functions of Huawei's Xinghe Intelligent WAN Solution.
- Differentiate Huawei enterprise routers and flexibly select applicable router and board models based on project requirements.

- Understand the application scenarios, network architectures, and model selection of routers in major industry markets.
- Understand the current situation and development trend of network security and get familiar with common network security products and basic knowledge
- Understand Huawei network security products, product functions and features, as well as the major sales scenarios
- Understand the technical features and applicable scenarios of Huawei security solutions
- Describe and learn the common functions of SCT.
- Configure data communication products with SCT and configuration Tips.

Course Content

Lesson 1: Data Communication Network Basics

- Data Communication Network Overview
- Data Communication Networking Technologies

Lesson 2: Overview of Huawei Enterprise Datacom Network Solutions

- Huawei Enterprise Data Communication Business Overview
- Huawei Enterprise Datacom Network Solutions
- Success Stories

Lesson 3: Huawei Cloud Campus and Switch Products:

- Campus Network and Solution Overview
- Huawei High-Quality 10 Gbps Campus Network Solution Highlights
- CloudEngine S Series Switches

Lesson 4: Huawei WLAN Products and Solution:

- WLAN Overview
- Wi-Fi Standard Development and Value
- Huawei Wi-Fi 6/7 Cutting-Edge Technologies and Continuous Networking Solutions
- Huawei Wi-Fi Product Portfolio

Lesson 5: Huawei Campus SD-WAN Products and Solutions

- Development Trends and Challenges Facing WAN Interconnection
- Introduction to Huawei SD-WAN Solution
- Introduction to Huawei NetEngine AR Products

Lesson 6: Huawei Data Center Network Products and Solutions

- DCN Fundamentals
- Huawei Ultra-Resilient Multi-DC Network Solution
- Huawei Computing Network Solution
- CloudEngine Switch Products Introduction
- Market Progress

Lesson 7: Huawei WAN Products and Solutions

- Scenarios and Trends
- Introduction to Huawei NetEngine routers
- Industry Application Solutions for Huawei NetEngine Routers
- Reference Documents for Huawei Routers

Lesson 8: Huawei Network Security Products and Solutions

- Network Security Challenges
- Huawei Security Product Overview
- Huawei Security solution

Lesson 9: Introduction of SCT & How to Configure Data Communication Products with SCT

- General Introduction of SCT
- Common Functions of SCT
- How to Configure Data Communication Products with SCT
- Typical Cases

ASSOCIATED CERTIFICATIONS & EXAM

The pre-sales specialist certification is designed for Huawei channel partners, to introduce and position Huawei products and solutions. The certification validates employee proficiency in addressing customer queries, understanding typical application scenarios of the products, sales bidding, and quotation requests.

The HCSA-Presales-IP Network certification exam # H19-301 is targeted at the sale of Huawei enterprise network IP datacom products. With an HCSA-Presales-IP Network certification, you are able to demonstrate a good understanding of Huawei IP datacom products and the personalized needs of customers. In addition, able to demonstrate IP datacom product designing capability.