# HCIE-WLAN V1.0 Exam Outline

**Huawei HCIE-WLAN V1.0 Certification Exam**

| Certification | HCIE-WLAN | |
|---|---|---|
| Exam Code | H12-351 | H12-352 |
| Exam Name | HCIE-WLAN (Written) | HCIE-WLAN (Lab) |
| Exam Format | Single-answer Question, Multiple-answer Question, True or false, Drag and Drop Item, Short Response Item | Operation, Eassy Item |
| Language | ENU/CHS | ENU/CHS |
| Exam Cost | 300 USD | 1200 USD |
| Exam Duration | 90 mins | 480 mins |
| Pass Score/ Total Score | 600/1000 | 80/100 |

**Exam Contents**

The HCIE-WLAN Certification Exam covers:

- WLAN networking
- WLAN Reliability technology
- WLAN radio resource management
- WLAN admission control
- WLAN security and defense
- WLAN and IoT
- WLAN location technology
- WLAN IPv6 networking technology
- CloudCampus solution
- WLAN troubleshooting
- Intelligent O&M
- WLAN network optimization
- WLAN network planning.

**Written & Lab Key Points Percentage**

| Chapter | Written | Lab |
|---|---|---|
| 01 Huawei WLAN Certification Overview | 0% | 0% |
| 02 WLAN Networking Technology | 7% | 15% |
| 03 WLAN Reliability | 6% | 5% |
| 04 WLAN Roaming | 5% | 5% |
| 05 WLAN RF Resource Management | 7% | 5% |
| 06 WLAN Multicast and mDNS | 3% | 5% |
| 07 WLAN Security and Defense | 6% | 5% |
| 08 WLAN Network Admission Control | 7% | 15% |
| 09 WLAN and IoT convergence | 5% | 0% |
| 10 WLAN Wireless Location Technology | 3% | 0% |
| 11. Constructing an IPv6 WLAN | 5% | 5% |
| 12. CloudCampus Solution | 7% | 0% |
| 13. CloudCampus Large- and Medium-Sized Campus Network Solution | 4% | 0% |
| 14. CloudCampus Small- and Medium-Sized Campus Network Solution | 4% | 0% |
| 15 CloudCampus Large-Scale Campus Network Solution Deployment (VXLAN Virtual Campus Network) | 2% | 15% |
| 16. Deployment of the CloudCampus Small- and Medium-Sized Campus Network Solution | 1% | 0% |
| 17 WLAN Troubleshooting | 7% | 5% |
| 18 Intelligent O&M | 5% | 0% |
| 19 Wireless Network Optimization | 6% | 5% |
| 20 Large-scale WLAN Networking Practice | 7% | 15% |

**Knowledge Points**

**1 WLAN Networking Technology**

1.1 WLAN Networking Architecture

1.2 Principles and Configurations of the Navi AC

1.3 Principle and Configuration of Leader AP

1.4 Mesh Principle and Configuration

1.5 Principles and Configurations of GRE and IPSec VPN

**2 WLAN Reliability**

2.1 WLAN Dual-System Hot Backup

2.2 WLAN Dual-Link Cold Backup

2.3 WLAN N+1 Backup

2.4 WLAN CAPWAP link disconnection survival

**3 WLAN Roaming**

3.1 WLAN Roaming Technologies

3.2 WLAN Roaming Optimization

3.3 WLAN Fast Roaming and Smart Roaming

3.4 WLAN Roaming Troubleshooting

**4 WLAN radio resource management**

4.1 WLAN Radio Calibration

4.2 WLAN Load Balancing

4.3 WLAN Anti-Interference

4.4 WLAN QoS

4.5 VIP User Experience Assurance

**5 WLAN Multicast and mDNS**

5.1 WLAN Multicast Network Optimization

5.2 mDNS and mDNS Gateway

**6 WLAN Security and Defense**

6.1 WLAN Management Plane Security

6.2 WLAN Control Plane Security

6.3 WLAN Forwarding Plane Security

**7 WLAN Network Admission Control**

7.1 WLAN 802.1X Authentication

7.2 WLAN Portal Authentication

7.3 WLAN MAC Authentication

7.4 WLAN Hybrid Authentication

**8 WLAN and IoT convergence**

8.1 IoT Wireless RF Technologies

8.2 WLAN IoT Application Scenarios

8.3 Huawei WLAN IoT Solution

**9 WLAN location**

9.1 WLAN Location Technology

9.2 WLAN Location Technology Application Scenarios

**10 WLAN IPv6 network**

10.1 IPv6-based WLAN Networking and Application

10.2 IPv6-based WLAN Admission Control

10.3 IPv6-based WLAN Network Security

**11 CloudCampus Solution**

11.1 CloudCampus Large-, Medium-, and Small-sized Campus Network Solution

11.2 Underlay Network Design, Deployment, and O&M

11.3 Fabric Design, Deployment, and O&M

11.4 Overlay Network Design, Deployment, and O&M

11.5 WLAN Admission Control and Free Mobility Design

11.6 WLAN O&M Management Design and Deployment

**12 WLAN Troubleshooting**

12.1 WLAN Network Troubleshooting Roadmap

12.2 WLAN Network Troubleshooting

12.3 WLAN Network Fault Cases

**13 Intelligent WLAN O&M**

13.1 CampusInsight Functions and Deployment

13.1 CampusInsight Application Scenarios

**14 Enterprise WLAN Optimization Design**

14.1 CampusInsight Application Scenarios

14.2 Introduction to Enterprise WLAN Network Optimization

14.3 Enterprise WLAN Network Evaluation

14.4 Enterprise WLAN Optimization Solution Design

14.5 Solution Implementation and Acceptance

**15 Large-scale WLAN Networking Practice**

15.1 WLAN Project Lifecycle

15.2 WLAN Project Deliverables

15.2 WLAN Project Cases

NOTE

The content mentioned in this document is a general exam guide only. The exam may also contain more specific or related content that is not mentioned above.

**Reference**

HCIE-WLAN V1.0 Course

**Recommended Training**

HCIE-WLAN V1.0 Training