

---

## Certified Wireless Design Professional

**Duration: 3 Days    Course Code: CWDP**

---

### Overview:

Do you have the skills to design an Enterprise network? Do you understand the architectures and protocols of a WLAN? Can you conduct a thorough site survey, design end-to-end security and validate your designed network? Well, now is your chance to prove it, and in turn, earn a Certified Wireless Design Professional (CWDP) certification.

The CWDP Wireless LAN Design course consists of instructor-led training applicable to the design of wireless LANs using the latest technologies including 802.11n and 802.11ac.

The course goes in-depth into the design process and provides attendees with the knowledge needed to plan, deploy and test modern 802.11-based networks. It also prepares students for the CWDP examination. Students who complete the course will acquire the necessary skills for preparing, planning performing and documenting site surveys and wireless LAN design procedures.

The CWDP is highly respected within the IT industry and CWDP-certified candidates hold a significant advantage in terms of career and salary advancement.

Measure your skills and knowledge with this professional-level certification and get on track toward ultimately earning your Certified Wireless Network Expert (CWNE) certification. Those that pass the CWDP exam earn credit towards a CWNE certification.

---

### Target Audience:

This specialist level training is for those who are interested in obtaining the CWNP credential.

---

### Objectives:

- Objectives of this course are:
  - Understand Design Strategies
  - Describe Best Practices for Network Planning
  - Explain the Available Technologies to Satisfy 802.11n and 802.11ac Design Requirements
  - Describe Advanced Site Surveying
  - Understand Design Troubleshooting Methodologies
  - Case studies may be used in groups to explore concepts learned in the lecture materials.
  - Potential case studies include:
    - Designing for future capacity
    - Designing in a moderate interference environment
    - Designing multiple SSID networks
- 

### Prerequisites:

- CWNA-level knowledge (enterprise Wi-Fi) is expected

### Testing and Certification

This training will prepare you for the Certified Wireless Design Professional (CWDP) certification.

#### What it takes to become a CWDP:

The CWDP certification is a professional level wireless LAN certification for the CWNP Program. To earn a CWDP certification, you must hold a current and valid CWNA credential. You must take the CWDP exam at a Pearson Vue Testing Center and pass with a 70% or higher. Instructors must pass with a 80% or higher.

However you choose to prepare for the CWDP exam, you should start with the exam objectives, which cover the full list of skills tested on the exam.

The CWDP certification is valid for three (3) years. To recertify, you must have a current CWNA credential and pass the current CWDP

exam.

By passing the CWDP certificate, your CWNA certificate will be renewed for another three years.

---

### Follow-on-Courses:

CWSP - Enterprise Wi-Fi Security

---

## Content:

The following list contains the materials covered in the lecture portion of the

- Importance of good design
- Impact of bad design
- Design process
- Design skills
- Design toolkit
- Pre-planning
- Customer interaction
- Requirements gathering
- Discovering existing systems
- Documenting the environment
- Defining constraints
- Creating documentation
- Client device types
- Application types
- Application-specific design
- High density design issues
- Standard corporate networks
- Industry-specific designs
- Government
- Healthcare
- Hospitality
- Education
- Retail
- Public hotspots
- Transportation
- Mobile offices
- Outdoor and mesh
- Remote networks and branch offices
- Last-mile/ISP and bridging
- Defining vendor issues
- Operational planes
- Design models
- Understanding architecture differences
- RF spectrum
- RF behaviors
- Modulation and coding schemes
- RF accessories
- Throughput factors
- Antennas
- 802.11n and antennas
- Choosing APs
- Powering APs
- Site survey tools
- Site survey preparation
- Predictive site surveys
- Manual site surveys
- Site survey principles and processes
- Quality of Service (QoS) overview
- QoS application points
- Roaming support
- Bad security
- Authentication solutions
- Encryption solutions
- Security best practices
- Intrusion prevention
- Network health status
- Troubleshooting and validation process
- Troubleshooting and validation tools

## Common problems

- Requirements Analysis
- Designing for Clients and Applications
- Designing for Industry/Vendor
- Selection Processes
- Radio Frequency Planning
- WLAN Hardware Selection
- Site Surveys
- Designing for QoS
- Designing for Security
- Installation Testing, Validation and Troubleshooting
- Design Troubleshooting

---

### Additional Information:

Case studies may be used in groups to explore concepts learned in the lecture materials.

Potential case studies include: Designing for future capacity Designing in a moderate interference environment Designing multiple SSID networks  
Global Knowledge is a CWNP Authorized Learning Center.

---

### Further Information:

For More information, or to book your course, please call us on 0800/84.009

[info@globalknowledge.be](mailto:info@globalknowledge.be)

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