Certified Wireless Network Administrator

Duration: 5 Days   Course Code: CWNA

Overview:

The goal of this CWNA course is to add Wi-Fi expertise to a networking professional's skillset, while covering all CWNA exam topics. The course begins with discussion topics and hands-on lab exercises covering the basic operation of 802.11 Wi-Fi technology. Once a base of Wi-Fi knowledge is established, enterprise relevant topics such as Wi-Fi design, security, and troubleshooting are covered.
Get a head start right out of the gate with a Certified Wireless Network Administrator (CWNA) certification. It is the base certification for Enterprise Wi-Fi within the CWNP family of certifications and a springboard toward earning your security, design, analysis and network expert certifications. Achieving it enhances your networking career profile, providing evidence that you have sought after Wi-Fi knowledge and skills.

Target Audience:

IT professionals and network engineers responsible for installing or supporting 802.11 (Wi-Fi) Wireless networks IT professionals wanting to progress within the wireless network industry Network planners, designers and support staff IT Security staff, managers and auditors

Objectives:

- After completing this course, you will be able to:

- Understand and apply the essential concepts of Radio Frequency (RF) technology, including RF planning, RF-related calculations and spread spectrum technologies.

- Perform RF Spectrum Analysis for the 2.4GHz and 5GHz bands.

- Describe the rules governing wireless LANs, to comply with local radio regulations for setup and maintenance of WLANs.

- Describe the fundamental operation of wireless LANs, for effective WLAN problem analysis and troubleshooting.

- Understand IEEE 802.11b, 802.11g, 802.11a, 802.11n, 802.11ac and 802.11ax (Wi-Fi 6) standards and amendments; and their practical relevance in depth.

- Correctly install, configure and support Wi-Fi adapters, access points, wireless bridges and WLAN antennas.

- Understand 802.11 / Wi-Fi WLAN Physical and MAC -layer operation in depth.

- Describe and troubleshoot WLAN problems including RF coverage, multipath, hidden nodes and interference problems.

- Understand the essential tools and processes used in WiFi Site Survey.

- Work with sophisticated WLAN diagnostic tools from Ekahau, AirMagnet, MetaGeek, Savvius, Tamosoft and more.

- Describe the insecurities inherent in IEEE 802.11 WLANs.

- Apply best security practices, including WPA2 and WPA3, to secure Wi-Fi networks for small, medium and large organisations.

Prerequisites:

- Understanding Networking Fundamentals (GK3150)

Testing and Certification

This course prepares for the CWNA (Certified Wireless Network Administrator) exam (CWNA-108). Selfstudy will be needed before taking the exam.
The CWNA certification is a foundational level wireless LAN certification for the CWNP Program. To earn a CWNA certification, you must take the CWNA 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 CWNA exam, you should start with the exam objectives, which cover the full list of skills tested on the exam. The CWNA certification is valid for three (3) years. To recertify, pass one of the professional level certifications exams (CWSP,CWDP, CWAP) BEFORE your CWNA expires. By doing so, the CWNA will be renewed for another three (3) years. Or

retake the current version of the CWNA exam.

While the Certified Wireless Specialist (CWS) and Certified Wireless Technician (CWT) certifications are not a required prerequisite to the CWNA certification, it is highly recommended. It will provide a solid learning foundation before continuing to pursue the CWNA.

Content:

o Link Budget	o Connection Frame exchange	o RRM, Band Steering and Airtime Fairness
Chaper 4 - RF Antennas and Hardware	o State Machine and 4-way Handshake	o Hotspots
o Antenna Fundamentals	o EAP Intro	o Wired Network Services
o Polarization, Gain, Radiation	o BSS selection	

Additional Information:

Global Knowledge is a CWNP Authorized Learning Center.

The official CWNA courseware will be used during the course. This course is based on the current CWNA-108 release and will prepare you for the belonging certification.

Further Information:

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

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