BUILDING SECURE AND ROBUST WIRELESS NETWORKS

COURSE 2 OVERVIEW

CURRICULUM: Extreme Academy Course 2

CERTIFICATION LEVEL: Associate

CERTIFICATION FULL NAME: Extreme Networks Associate – Building Secure and Robust Wireless Networks

CERTIFICATION SHORT NAME: XNA - Building Secure and Robust Wireless Networks

WATCH COURSE ON DEMAND

DESCRIPTION

In this course you will learn about Wireless Networks and their importance to required business outcomes. You'll be taking a deeper dive into the world of wireless, touch on subjects such as design best practices, standards, security and others with the goal of building robust wireless networks.

DURATION / TIMING

Course designed for 2 days of training or 12 hours. Timings are recommended; however, an Instructor may wish to spend more or less time on certain topics. The course can be delivered as a 2-day block or spread out over time.

SUGGESTED STUDENT VIEWING

Extreme Networks Associate – Introduction to Future Networking

MODULES	MAIN TOPICS AND LEARNING OBJECTIVES
MODULE 1. WHY WIRELESS?	– User experience. What does Wi-Fi mean to you? – Business outcomes: Productivity, Engagement & Governance – Use-cases examined by sector/vertical – Fundamental Concepts – Recap of Wi-Fi lessons from Course 1.
MODULE 2. HOW IT ALL WORKS (UNDER THE COVER) …	– The RF Signal explained – Encoding and Modulation techniques – Multiplexing – Effects on RF Signals – Signal to Noise Ratio (SNR) – Antennas
MODULE 3. STANDARDS AND HOW DEVICES TALK TO EACH OTHER	– IEEE 802.11 Standards: a, b, g, n, ac – MAC Layer – PHY Layer – Wi-Fi 6 examined – The future (802.11be)
MODULE 4. DESIGN BEST PRACTICE	– Planning deployment – Work Breakdown Structure (WBS) – Defining requirements – 802.11ax (Wi-Fi 6) design considerations
MODULE 5. SECURITY	– How do we control who accesses my network and what they access? (NAC, Authentication and Guest Access, shadow IT) – How do we secure the data running across my network? (Encryption, WIPs)
MODULE 6. INSTALLATION AND TESTING	– Why would you want to do a site survey? – Common test tools – Site-survey ‘light’ overview – Installing and configuring
MODULE 7. MANAGEMENT ARCHITECTURE	– On premise – Cloud – SDN
MODULE 8. TO INFINITY AND BEYOND THE CONNECTION…	– Enhanced methods of using Wi-Fi: Beyond Connectivity – Wireless is the enabler and the power of data – Looking at use-cases by sector/vertical
MODULE 9. TOP CONSIDERATIONS WHEN SELECTING THE TECHNOLOGY…	– Top 5 generic considerations – Top 10 customer considerations