CWDP - Certified Wireless Design Professional/CWDP-304

Course outline –

WLAN Design Overview:

- 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 IndustryVendor
- Selection Processes
- Radio Frequency Planning
- WLAN Hardware Selection
- Site Surveys
- Designing for QoS
- Designing for Security
- Installation Testing, Validation and Troubleshooting
- Design Troubleshooting