**Cel szkolenia:**

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.

**Plan szkolenia:**

- **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 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

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

Trainers may include hands-on lab time using any or all of the following tools:

- Spectrum analyzer
- Protocol analyzer
- Site survey software
Diagramming software
- Various wireless adapters and antennas
- Various wireless APs

Wymagania:

Required **CWNA**-level knowledge (enterprise Wi-Fi).

Suggested **CWSP** and **CWAP**- level knowledge.

Poziom trudności

Certyfikaty:

This course helps prepare for CWDP exam CWDP-302 available at **Pearson VUE test centers** ([www.vue.com/cwnp](http://www.vue.com/cwnp)).

The **CWDP® (Certified Wireless Design Professional) certification** will advance your career by ensuring you have the skills to successfully design enterprise Wi-Fi networks for a variety of different applications, deployments, and environments, no matter which brand of Wi-Fi gear your organization deploys.

Prowadzący:

Authorized CWNP Trainer.