Certified Network Cabling Design Professional (CNCDP)

Category: Networking & Security | **Vendor:** EPI

Duration: 16.00 hours (2 days) **13.0 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Certification: Certified Network Cabling Design Professional (CNCDP)

Course Overview

It is therefore vital that the mission-critical data centre is designed, maintained and operated with high-availability and efficiency in mind. Among all the facilities, network cabling is the foundation for the network and one of the major contributors to the availability of the data center.CNCDP® is a 2-day course designed to expose participants to in-depth knowledge in designing and installing the data network cabling system which includes key subject matters such as; technical standards, designing of different cabling sub-systems, calculation of material requirements, architecture, installation, testing and acceptance.

About This Course

It is therefore vital that the mission-critical data centre is designed, maintained and operated with high-availability and efficiency in mind. Among all the facilities, network cabling is the foundation for the network and one of the major contributors to the availability of the data center.CNCDP® is a 2-day course designed to expose participants to in-depth knowledge in designing and installing the data network cabling system which includes key subject matters such as; technical standards, designing of different cabling sub-systems, calculation of material requirements, architecture, installation, testing and acceptance.

Who Should Attend

The primary audience for this course is any IT, facilities or data centre professional, consultant and/or those who work in network cabling system design, implementation and operation.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

With few exceptions, enterprises today rely on IT for the delivery of business-critical services - often directly to the end consumer.

Detailed Course Outline

Introduction to Structured Cabling System (SCS)

- Brief history of SCS
- Basic copper and fibre transmission
- Copper and fibre cabling
- Single and multimode fibre
- Step/graded index multimode fibre
- Difference between Commercial Wiring and data centre cabling
- Development of standards
- Role of standards
- ANSI/TIA 568 standard
- Common standards
- The new usage of cabling to support Smart building

Horizontal and Administration - Commercial Building

- Standard diagram recap: ANSI/TIA-568
- Functional elements and example
- Scenario A: Determine the number of work areas
- Scenario B: Determine the number of user locations
- Zone wiring
- Administration: Interconnect and cross-connect
- Angled and flat panels
- Creating a cabling schematic design
- Convert schematic into physical layout
- Calculating the material list

Horizontal and Administration - Data Centre

- Standard diagram recap: TIA-942
- Basic/Reduced/Typical data centre setup
- Traditional 3 layers network design/ Spine and Leaf network design
- Select termination hardware
- Administration design
- ToR/EoR/Spine & Leaf cabling design
- Network and cabling resiliency
- Create cabling schematic design for ToR/EoR
- Convert into patch panel/rack layout
- Calculate the material list for ToR/EoR

Building Backbone - Commercial Building

- Backbone diagram
- Calculate the copper backbone requirements per Telecom Room (TR)
- Calculate the fibre backbone requirements per Telecom Room
- Summarize the building backbone requirements
- Recognised cables
- Backbone Patch panels
- The maximum backbone distances
- Create cabling schematic design
- Converting the schematic design into patch panel/ rack layout

Building Backbone - Data Centre

- TIA-942 based backbone topology
- TIA-942 backbone requirements
- Recognised backbone cable
- ToR/EoR/Spine and Leaf
- Backbone distance estimation
- Resiliency of backbone cable routes
- Creating cabling schematic design
- Converting the schematic design into patch panel/ rack layout
- Field and Fusion Termination for fibre connectors
- Pre-terminated fibre trunk and copper cables

Architectural Considerations

- ANSI/TIA569-D Cable pathway and spaces
- Common requirements for the rooms
- Definition of the rooms
- Entrance Room/Demarcation
- Ceiling and floor pathways types
- Cable trays/basket/ladder/conduit
- Inner duct/sleeve/slot
- Calculating of pathway size
- Cable run best practices
- Cable management/AIM
- Grounding and bonding
- Separation distance requirements for copper cabling to power cabling
- Fire stopping
- Fire rated barrier
- Fire rated jacket cable

Campus / Outdoor Backbone

- Common campus cable installation and cable types : Aerial cable / Direct-buried / Underground in-conduit
- Outdoor cable installation planning
- Lightning / surge protection
- Approved ground for surge protector
- Creating a schematic diagram
- Converting a schematic into a physical layout

Site Inspection and Testing

- Visual site inspection notes
- Installation common issues
- Copper testing standard
- Permanent link / Channel / Patch cord / MPTL testing configuration
- Fibre connectors
- Fibre testing standard
- Tier 1 & 2 certification
- Fibre link definition
- Fibre testing steps
- Fibre inspection and cleaning
- Calibrating the test sets - 3 methods
- Setting up mandrel for testing
- Fibre loss budget calculation
- G.657 Bend insensitive fibre
- Optical Time-Domain Reflectometer (OTDR)

Exam - Certified Network Cabling Design Professional (CNCDP®©)

- The exam is a 60-minute closed book exam, with 40 multiple-choice questions.
- The candidate requires a minimum of 27 correct answers to pass the exam.

Additional Course Details

Nexus Humans Certified Network Cabling Design Professional (CNCDP) training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the Certified Network Cabling Design Professional (CNCDP) course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

Frequently Asked Questions

Q: What delivery options are available for Certified Network Cabling Design Professional (CNCDP)?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: What certification does this course prepare me for?

The Certified Network Cabling Design Professional (CNCDP) course helps prepare you for the Certified Network Cabling Design Professional (CNCDP) certification path.

Q: How many CPD hours does this course provide?

The 2-day Certified Network Cabling Design Professional (CNCDP) course provides up to 13.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Certified Network Cabling Design Professional (CNCDP) training?

The training takes place over 2 day(s), with each day lasting approximately 16.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Certified Network Cabling Design Professional (CNCDP)?

Yes, we provide corporate training, dedicated training, and closed classes for Certified Network Cabling Design Professional (CNCDP). Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: Why choose Nexus Human for Certified Network Cabling Design Professional (CNCDP)?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Certified Network Cabling Design Professional (CNCDP) training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

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