Certified Network Infrastructure Technician (CNIT®)

Take your existing network infrastructure skills to new levels allowing you to successfully control and deliver major infrastructure projects.

Program Overview

The five-day Certified Network Infrastructure Technician (CNIT®) program develops the knowledge and skills required to perform the multifaceted role of delivering complex projects to the site. Learners will greatly enhance their supervisory and management skills through a series of complex case studies, mastering the knowledge and understanding required to interpret complex design documentation, the need to establish effective relationships and communications with principle stakeholders, and managing the end-to-end project implementation cycle. Learners will develop an aptitude for logistics and resource management, including team health and safety, and dealing with the risks and issues that can impact project delivery. A certified CNIT® will be undaunted when dealing with escalations and problem resolution within a strategic network infrastructure project. The impact to the project delivery of current and emerging networking technologies will also be explored, including wireless access, security systems and VOIP.

Learners will gain an in-depth knowledge of technical parameters for cable testing and will demonstrate confidence when dealing with escalations from installers undertaking cable testing. Experience will also be gained in the management of test records using cloud-based applications, from cable testing through to the delivery of warranty certificates to the customer. On successful completion, learners can demonstrate the highest levels of knowledge, competency and confidence in supervising the delivery of complex infrastructure projects, demonstrating efficiencies in both time and cost, coupled with a focus on quality and accuracy, to achieve project closure on time and within budget.

A certified CNIT® also considers the requirements for compliance, having a full understanding of national and international regulations, codes and standards. During the program learners will be provided a valuable opportunity to access the latest industry standards.

The CNIT® program is led by one of CNet's expert Instructors and is available via remote attendance or classroom-based.

CNet Training
An Uptime Education Company

The Global Leader in Technical Education for the Digital Infrastructure Industry

Program Duration

5 days.

Program Format

50% Theory, 50% Case Study.

Program Objectives

Learners will gain the supervisory and management skills, knowledge and competency to confidently deliver complex infrastructure projects within site environments.

Learner Profile

This program is designed for those wishing to extend their knowledge, skills, qualifications and certifications into a wider and more complex project environment with emphasis on enhancing supervisory, leadership and management skills.

Pre-requisites

A minimum of two years installation experience within the network infrastructure sector is required. Successful completion of the Certified Network Cable Installer (CNCI®) program would be advantageous. If you would like to discuss your experience or suitability for this program please contact us.

Program Requirements

Learners are required to have:

- A webcam and microphone enabled laptop with unrestricted wireless internet connectivity and a pre-installed web browser
- A suitable application for reading/annotating PDFs and a suitable application for editing standard office documents such as Microsoft Word, PowerPoint, and Excel

Qualification

- Internationally and industry recognised Pearson BTEC Level 4 Award in Certified Network Infrastructure Technician

Certification

- Certified Network Infrastructure Technician (CNIT®) certification
- Use of the CNIT post nominal title
- Use of the official CNIT® digital badge
- Use of the CNIT® logo

Certifications are a commitment to lifelong learning and offer the perfect portal to ensure knowledge, skills and certification remain current and up-to-date. Each certification gained requires re-certifying every three years via an online learning management system.

Additional Awards

- Eligibility for an ECS (Electrotechnical Certification Scheme) Network Infrastructure Supervisor card (only available in the UK)
- Continual Professional Development (CPDs)
- 5 IEEE Continual Education Units (CEUs)

"Lots to learn and put into motion. The CNIT® program gave me a greater insight into what I am doing and things I should be doing in my day-to-day. The Instructor was extremely knowledge with plenty to share."

CNIT® Learner Comment

Certified Network Infrastructure Technician (CNIT®) Topics

Role of the CNIT®
- Within:
  - The core layer
  - The distribution layer
  - The access layer

Fundamentals of Network Architecture
- Networking protocols
- Ethernet
- Network architecture
- Active network devices
- 3 layer network topology
- Bandwidth demand
- Intelligent building infrastructure
- Internet of Things (IoT)
- Wireless network standards
- 802.11 variations
- IEEE standards
- Frequency bands
- Channel overlap
- Power Over Ethernet (PoE)

Compliance
- National/international standards
- Legislative requirements
- Good practice
- BS EN 50173 series
- BS EN 50174 series
- Other supporting BS EN standards
- Construction products regulations
- The approach to implementing standards

Design Documentation
- Active network design drawings
- Inside plant drawings
- Outside plant drawings
- Network equipment room design
- Bill of materials
- Patch lists
- Rack face layout

Health and Safety
- General requirements
- CDM requirements
- Permits and cards
- Legal requirements
- Risk
- Identification
- Evaluation
- Mitigation
- Risk assessments and method statements
- Tool box talks

Network Implementation Management
- Outside plant
- Manholes and building entry points
- OSP cable run-out list
- Material call off
- Task planning
- Inside plant
- Pathways and containment systems
- Material call off
- Task planning
- Quality Assurance

Fire Safety
- Regulations
- Compartmentation
- Fire stop rated materials
- Construction Product Regulations (CPR)

Test Procedures and Escalations
- Certification versus qualification
- Warranty requirements
- Testing principles
- Test standards
- Copper cabling
- Custom setup
- Channel testing
- Requirements for PoE
- Dealing with test failure escalations
- Optical fibres
- Loss budgeting
- Passive optical networks
- Dealing with test failure escalation
- Certification

OEM Software Project Structure
- Complex project structure
- Project creation
- Importing test results
- Cloud access
- Re-certification

Change Control
- MACs
- Evaluating impacts on:
  - Cost
  - Time
  - Material

Project Closure
- Red-line drawings
- Certification
- Site closure

CNIT® Benefits for Individuals

- Utilise new multidisciplined supervisory knowledge to manage people and tasks confidently and competently
- Acquire new and improve existing technical skills, widening your scope of capability with up-to-date technology
- Gain greater understanding of project complexity enabling more effective delivery management
- Increased focus on service excellence resulting in a 'right first time' approach
- Raise awareness of stakeholders enabling more effective communications
- Improve ability to effectively manage teams, resulting in better team morale and performance
- Gain an industry recognised qualification and official certification

CNIT® Benefits for Businesses

- Added supervisory skills provides the ability to realise cost efficiencies through effective planning and manpower utilisation
- Improve confidence in project progression through accurate reporting
- Increase customer satisfaction leading to quicker project closure and final payment
- Greater opportunities for repeat business due to improved quality of service
- Implement a more structured delivery methodology through standardised task planning and strategies
- Investment in team development, improves morale and job satisfaction leading to greater staff loyalty