



**Certified Network  
Cable Installer**

Pearson BTEC Level 3 Award  
(Optical Fiber)

5 Day Program

An Uptime Education Company

Global Leading Technical Education  
for the **Digital Infrastructure Industry**

## Program Duration

► 5 Day CNCI® Fiber Optic Cabling

## Program Format

50% Theory, 50% Practical.

## Program Objectives

Successful learners will gain the knowledge and skills to confidently install, test and certify a complete fiber optic cable installation.

## Learner Profile

The CNCI® Fiber Optic Cabling program is perfect for individuals wishing to acquire the very latest skills and knowledge to enable them to complete fiber optic cable installation projects to the highest standards. It is relevant to new entrants to the network cable infrastructure sector in addition to those already working within the cable installation environment wishing to formalize their knowledge and skills.

## Pre-requisites

No previous experience is required to attend this program.

## Program Requirements

Learners are required to have:

- A laptop or suitable device with unrestricted wireless internet connectivity and a pre-installed web browser
- A suitable application for opening and reading PDFs. Typically, your device's in-built PDF reader is sufficient

## Qualification

- Pearson BTEC Level 3 Award in Certified Network Cable Installer (Optical Fiber)

## Certified Network Cable Installer (CNCI®) - Fiber Optic Cabling

Demonstrate the highest levels of knowledge, skills and competency in network cable infrastructure.

### Program Overview

Undertake fiber optic cabling installation, termination and testing to the highest quality whilst complying to industry best practice and standards to ensure a right first-time approach.

The Certified Network Cable Installer (CNCI®) has become the industry preferred certification for network cable installation and is specified as a requirement on many job profiles and installation project contracts. In addition, manufacturers, major installation companies, associations and consultants endorse the certification knowing that it provides the right level of technical knowledge, competence and confidence to the industry. In recognition of the CNCI® certification, many manufacturers also award accreditations towards their product warranties.

This comprehensive five-day program offers the perfect mix of technical knowledge and practical activities for fiber optic cable installation. Official CNCI® Fiber Optic Cabling certification proves that

an individual is certified to undertake network cable infrastructure projects to the highest caliber whilst working to the current national and international industry standards and industry best practice. During the program learners will be provided a valuable opportunity to access the latest industry standards.

Having successfully completed this program, it is recommended that you attend the CNCI® Copper Cabling program to secure the full CNCI® certification. Following this, and with the appropriate level of experience, it is highly recommended that you continue your professional development by advancing your knowledge and skills to gain further official certifications and qualifications by progressing through The Global Digital Infrastructure Education Framework which maps education programs to career advancement throughout the network infrastructure and data center sectors.

The CNCI® Fiber Optic Cabling program is classroom-based and led by one of CNet's expert Instructors.

## Certified Network Cable Installer (CNCI®) Fiber Optic Cabling - Topics

### Safely Working with Fiber/General Safety

- LED, VCSEL, laser safety
- Fiber preparation hazards, disposal of sharps
- Hazardous substances
- OSP safety, pits, gas detection
- General safety

### Network Overview

- History of fiber
- Advantages
- What is a network?

- Benefits of a network
- Topologies
- Why a network?

### Hardware

- Cable construction
- LED, VCSEL, laser sources
- Switches, routers, media converters

### Theory of Light Transmission

- Optical windows
- Electromagnetic spectrum

- Transmission
- Media choice

### Cable

- Construction
- Choice of cable
- Installation practices
- Patch cords

### Enclosures

- ODF
- 19" splice tray
- Slack fiber management, protection, patch field

### Standards

- Standards bodies - BSI, ISO, CENELEC, TIA/EIA
- Classifications
- Application distances

### Connectors

- Connector types
- Functionality
- Density (SFF)

### Outside Plant (OSP)

- Fiber backbone to the LAN
- Hardware
- Media choice

### Fiber Splicing

- Safety
- Fusion splicer set up and operation
- Singlemode programs
- Multimode programs
- Splicing in patch panels

### Fiber Termination

- Safety
- Pigtail manufacture
- Techniques, cold cure, mechanical splice, fusion splice
- End-face inspection techniques

### Fluke CCTT (Fiber)

- Tier 1 fiber certification (CertiFibre® Pro)
- Tier 2 fiber certification (OptiFibre® Pro)
- Encircled Flux (EF)
- End-face inspection
- Set a reference
- OTDR event types
- OptiFibre® Pro link testing

There are a number of individual practical activities and assignments leading to a group installation project.