Technician

COPT®

Certified Outside Plant Technician

BTEC Level 4 Professional Award

CNet Training

Customer Focused ▶▶
Quality Driven ▶▶▶▶

The **Global Leader** in **Technical Education**
for the **Digital Infrastructure Industry**

Certified Outside Plant Technician (COPT®)

5 DAY PROGRAM

Combined

30% Theory 70% Practical

Learner Profile
This program is designed for individuals experienced within the network cabling installation environment wishing to extend their hands-on practical skills, knowledge, qualifications and certifications in relation to fibre optic technology and infrastructure in the external environment.

Pre-Requisites
Two to three years experience of working 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 Objectives
Successful learners will have the knowledge and practical skills to confidently install, test and certify fibre optic installations in the external environment.

Qualification
▶ Internationally and industry recognised level 4 BTEC Professional Award

Certification
▶ Certified Outside Plant Technician (COPT®) certification
▶ Use of COPT post nominal title
▶ Use of the COPT® logo

Certifications are a commitment to life-long 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
▶ Continual Professional Development (CPDs)

Certified Outside Plant Technician (COPT®)

Program Overview

Fibre To The Everything (FTTx), learn how to construct high capacity, high quality external fibre optic networks to meet the demand of smart technologies of the future.

Big data is getting bigger, the development of smart technology devices and the concepts of the Internet of Things (IoT), smart homes, smart buildings and smart cities are driving a significant demand for wider network accessibility. Improvements in wireless technology and the increased deployment of wireless access points along with the rollout of small-cell technology (5G) aims to meet the growing demand for access. Underpinning all of this, as well as the UK government strategy for a 'full fibre broadband' access, is the need for a significant growth in the national fibre optic network structure.

The five-day Certified Outside Plant Technician (COPT®) program is a comprehensive program perfect for those with 2-3 years' experience within network infrastructure who wish to extend their knowledge, practical hands-on skills, qualifications and certifications into deployment of fibre optic connectivity in the external environment.

Learners can take their existing network cabling knowledge and skills to the next level by gaining a valuable insight into external fibre network distribution strategies, infrastructure components and installation methods. Passive Optical Networking (PON) features heavily as the primary delivery technology for fibre broadband to the home. Methods used for distribution will also feature, exploring the benefits and rationale behind the choice to distribute services underground or overhead.

Focused practical hands-on sessions are incorporated throughout this program, including the implementation of in-line splicing, high fibre-count distribution, Multi Dwelling Unit (MDU) cabinet installation and customer connection drops. Blown fibre practices also feature.

The duration of this program is five days; the content is comprehensive and detailed allowing network infrastructure professionals to have the potential to add real value to their skills by including these complex areas in their product/service portfolio. A COPT® will be undaunted when dealing with complex external fibre networks, able to rationalise the network structure and understand the functions of installed components.

A certified COPT® 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.

Following this program, you are encouraged to 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 centre sectors.

The COPT® program is classroom-based and led by one of CNet's expert Instructors.

COPT® Benefits for Individuals	COPT® Benefits for Business

COPT® Benefits for Individuals

▶ Further develop broader fibre knowledge and skills to gain greater opportunities in the industry
▶ Undertake work with much higher fibre counts using different termination techniques, building confidence with experience
▶ Increased technical knowledge and wider understanding of fibre network complexity

COPT® Benefits for Business

▶ Develop a broader installation capability, increasing business opportunities
▶ Have the assurance that you are developing a capable and reliable workforce, encouraging independence and reducing cost of failure
▶ Be confident that with greater network knowledge, your technicians can be more engaging with your customers, able to establish good working relationships and promoting future growth

Certified Outside Plant Technician (COPT®) Topics

COPT® Content

Role of the COPT®
▶ Role of the COPT® in:
  ▶ Planning external plant
  ▶ Construction of external pathways
  ▶ Working in the OSP environment

Regulations, Standards, Codes and Industry Best Practices
▶ Applicable BSEN Standards
▶ New Roads and Streetworks Act 1991
▶ Working in Confined Spaces
▶ Working at height

Fundamentals of Outside Plant Pathways Underground
▶ Route planning
▶ Pit and chamber construction
▶ Ducts and sub-ducts
▶ Building entry methods
▶ Blown fibre tubing
▶ Pathway security
▶ Installation methods

Fundamentals of Outside Plant Pathways Overhead
▶ Route planning
▶ Telegraph poles and other support structures
▶ Route stability
▶ Environmental clearances
▶ Wayleaves and pole sharing
▶ Pole route construction
▶ Installation practices

Passive Optical Networks
▶ Types; GPON, EPON, GEPON
▶ Wavelengths and bandwidth
▶ PON architecture
▶ PON components
▶ PON distribution methods

Testing External Fibre Optic Networks
▶ Tier 1 and Tier 2 testing requirements in the OSP environment
▶ Effects of passive splitters
▶ PON test methodology
▶ HD/TDR test functionality

Fibre To The Everything (FTTx)
▶ Fibre to the node
▶ Fibre to the curb
▶ Fibre to the building
▶ Fibre to the antenna
▶ Fibre to the home