

Network Cable Installer (NCI®) Apprenticeship OVERVIEW

Creating the next generation of competent, confident, and qualified network cable installation professionals



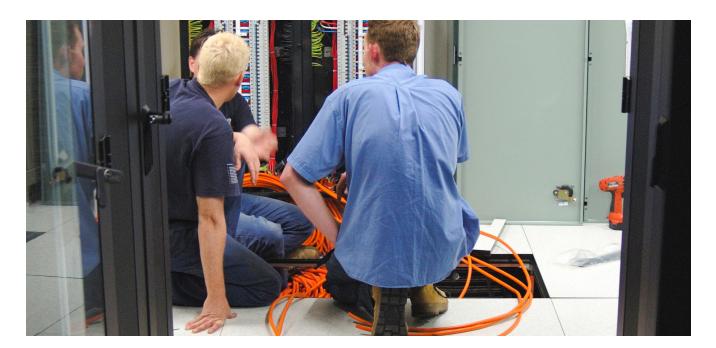
The Global Leader in Technical Education for the Digital Infrastructure Industry

The Network Cabling Sector

Everyone relies on network cabling, often without realising it...

Whether it is to check emails, send texts, manage traffic lights, air traffic control, watch Netflix, look at social media, run a global organisation, doctors surgery, you name it! Network Cable Infrastructure (copper + fibre optic cabling) is essential in providing the communications backbone for the digital infrastructure ecosystem, enabling all types of intelligent digital devices to communicate between each other, internally, nationally and globally. Connectivity is required to keep all the data flowing to enable continuity of service so everyone can continue to operate and communicate without disruption.

This essential nature is why the network cabling sector is known as the 4th utility; it is so important yet not many realise it. Just think about how many times you use internet-based services and products each day, that's why it's a sector that is only set to grow. Network cable installers who are able to prove their skills and knowledge with a certification and qualifications are in demand.



The Network Cabling Installer (NCI®) Apprenticeship

The First Government Funded Apprenticeship for Network Cable Installation

The Network Cable Installer (NCI®) Apprenticeship is levy funded up to £9,000 or 95% co-funded. It has been developed by major installation companies across the sector and is perfect for individuals wishing to acquire the knowledge and competency to enable them to complete both copper and fibre cable installation projects and demonstrate the highest levels of skills and expertise in network cabling infrastructures. It is relevant to new entrants to the cabling industry in addition to those already working within the cable installation environment wishing to improve their skills.

The Network Cable Installer (NCI®) Apprenticeship is an 'Apprenticeship in a Box', purely because all the planning has already been completed in readiness for both employers and employees to follow. This includes a detailed timetable of professional development activities to enhance knowledge and skills and become professionally certified, it therefore alleviates the need for the employer to dedicate valuable time and effort in this essential planning stage and allows the Apprentice to commence straight away.

This Apprenticeship allows individuals to following either an Internal infrastructure route or an external infrastructure route, both teach the knowledge and skills to confidently install, test and certify copper and fibre cable installations whilst working to the correct legislation, national standards and industry best practices.

What Do the Certifications and Qualifications Mean to Organisations?

For employers who have a team of certified and qualified individuals, it will instantly deliver confidence and competitive advantage to the marketplace, in addition to helping to secure the organisation's professional reputation.

There is also a benefit of the Return on Investment (ROI) associated with having a team of professionally trained, certified and qualified individuals, as they work more competently, accurately and efficiently.



NCI® Apprenticeship Benefits for Individuals

- Become one of the elite certified network cable installers in the country
- Follow the internal Apprenticeship route or the external Apprenticeship route
- Demonstrate the highest levels of knowledge, skills and expertise in network infrastructure installation
- Plan individual tasks and materials required accurately and with confidence
- Install copper and fibre network cable infrastructure projects on time and within budget, maximising profit potential
- Gain valuable on the job training
- ► The apprentice will be eligible to apply for registrations as a full member of the Institute of Telecommunications Professionals

NCI® Apprenticeship Benefits for Business

- ▶ 86% of employers said Apprenticeships helped them develop skills relevant to their organisation
- ▶ **78%** of employers said Apprenticeships helped them improve productivity
- > 74% of employers said Apprenticeships helped them improve the quality of their product or service
- Confidence that employees have a full and rounded knowledge in network infrastructure installation, improving competency and productivity
- Reduced time and material wastage employees can carry out tasks in an accurate and timely manner
- Delivering infrastructure installation projects to the highest quality standards resulting in increased client satisfaction and potential repeat business
- Meet contractual requirements reducing sign off and project hand over times

Role Profile

The role of the network cable installer is to install, terminate, test and certify network cable infrastructure components in accordance with National and International industry standards and codes of practice.

The size of the task or project that a network cable installer could be involved in ranges from a single outlet point in a customer's premises to thousands of outlets in smart buildings, industrial premises, healthcare environments for example, or from a single fibre cable termination in a building to the installation of hundreds of fibres over many kilometres in local, national and international communities.

The role of the installer is very physical and often involves lifting and moving heavy equipment. Striving to deliver excellent and consistent levels of customer service is also a vital part of the role. Installers work diligently to accurately interpret customer requirements and endeavour to meet high quality standards, so attention to detail is essential.



Role Duties and Tasks

Install copper cables to inter-connect devices and fibre optic cables used for connecting between floors within buildings, buildings to buildings and cities to cities, as well as providing the highest speed broadband to homes.

Interpret detailed project plans to construct and fix network equipment cabinets, prepare cable pathways, and install cable support and containment systems.

Install network
equipment in cabinets
in accordance with
manufacturer's
specifications, including
routers, switches and
Wide Area Network
(WAN) equipment.

Work in potentially hazardous areas such as building sites, highways and railways, and exercise responsibility for the safety of themselves as well as anybody in the local area who could be affected by their actions.

Undertake performancebased testing and provision of certification to the customer. During the lifespan of the network, carry out maintenance where faults have occurred.

Typical job titles include Network Cable Installer, Structured Cabling Installer and Telecomms Cable Installer.

Use workforce management systems for a range of workflow activities as well as personal time and attendance tracking.

Exercise responsibility for the care and maintenance of a wide range of specialist tools, ensuring that equipment is serviceable and in calibration (where appropriate), at all times

Installers may be called upon to work in the Inside Plant (ISP) environment which is dedicated to the installation of cable within buildings and structures, and the Outside Plant (OSP) environment, which is dedicated to the installation of cable externally between buildings, cities and countries.

Working Internally

The Inside Plant (ISP) installer is involved with the installation and maintenance of the Inside Plant, this may include:

- Containment routes
- Copper and fibre optic cables installation and termination
- Equipment cabinets
- Network hardware
- Customer outlets

Testing and commissioning also forms a critical part of the installation role, this may include:

- ► Copper cable links and channels
- Fibre optics cable links and channels
- Inspection and cleaning
- Qualification and certification

Internal environments may include (but are not limited to):

- Smart office buildings
- Data centres
- Healthcare facilities
- Government buildings
- Utility service buildings

Working Externally

The Outside Plant (OSP) installer is involved with the installation and maintenance of Outside Plant, this may include:

- External OSP route construction
 - External pit and duct infrastructure
 - ► Installation of sub-duct systems
 - Dressing and planting telegraph poles
- Installation of fibre optic cable underground
- Installation of fibre optic cable overhead

External environments may include (but are not limited to):

- Highway infrastructure supporting WAN connectivity
- ► Highway infrastructure supporting Fibre To The Home (FTTH)
- ► Intercontinental submarine cables
- Track-side railway signalling and control networks
- ► Town centre infrastructure supporting wireless distribution and security cameras

In addition network cable installers will be called upon to assist design teams to provide site specification information in support of the design process, this may include selecting pathways for containment routes, providing accurate measurements and details of obstructions to be considered.

On project completion, installers will be required to provide accurate red-line drawings and test certificates to support project closure.





Overview

Gain the knowledge and skills, backed up by official certifications and qualifications, to confidently install, test and certify copper and fibre cable installations in an internal or external environment, whilst working to the correct standards and best practices.

Learner Profile

The NCI® Apprenticeship is perfect for individuals wishing to acquire the very latest skills and knowledge to enable them to complete both copper and fibre cable installation projects to the highest standards whilst gaining valuable on-the-job-training. It is relevant to new entrants to the cabling industry in addition to those already working within the cable installation environment wishing to improve their skills.

Entry Requirements

Maths and English at Level 2 is required to attend the Apprenticeship. No previous experience is required to attend this program, however if you are working in the Network Infrastructure industry, it will prove advantageous.

Duration

Typically, 15-18 months

Funding

Up to £9,000

Delivery Method

On and Off-the-Job.
Block Release

Health & Safety Training

- ► Health, Safety & Welfare in Construction
- L2 Confined Spaces
- Working at Heights
- ► PASMA Mobile Towers
- Asbestos Awareness Training
- NRSWA Guarding and Lighting Operative
- First aid at work

Professional Recognition

On completion, the Apprentice will be eligible to apply for registration as a full member of the Institute of Telecommunications Professionals and is eligible to apply for an ECS card (see below).

Successful completion of the NCI® Apprenticeship Internal awards:

- ▶ Official Certification Certified Network Cable Installer (CNCI®) certification
- Pearson BTEC Level 3 Award Certified Network Cable Installer (Copper)
- ► Pearson BTEC Level 3 Award Certified Network Cable Installer (Optical Fibre)
- NRSWA Guarding and Lighting/Operative Unit 2
- ▶ Once enrolled the Apprentices are eligible for an EPA (End Point Assessment)
- Eligibility for an ECS (Electrotechnical Certification Scheme) Network Infrastructure Installer (Level 3) Card
- ► Fluke CCTT® Certification
- ► Certificate of completion Network Infrastructure Fundamentals (NIF®)

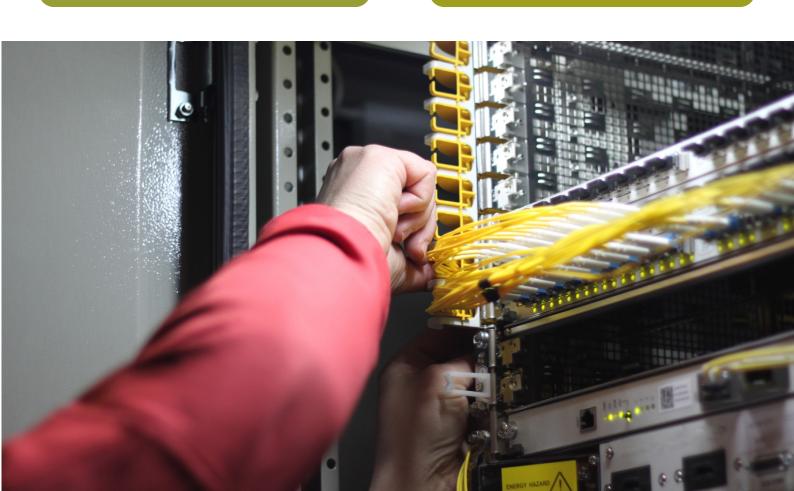
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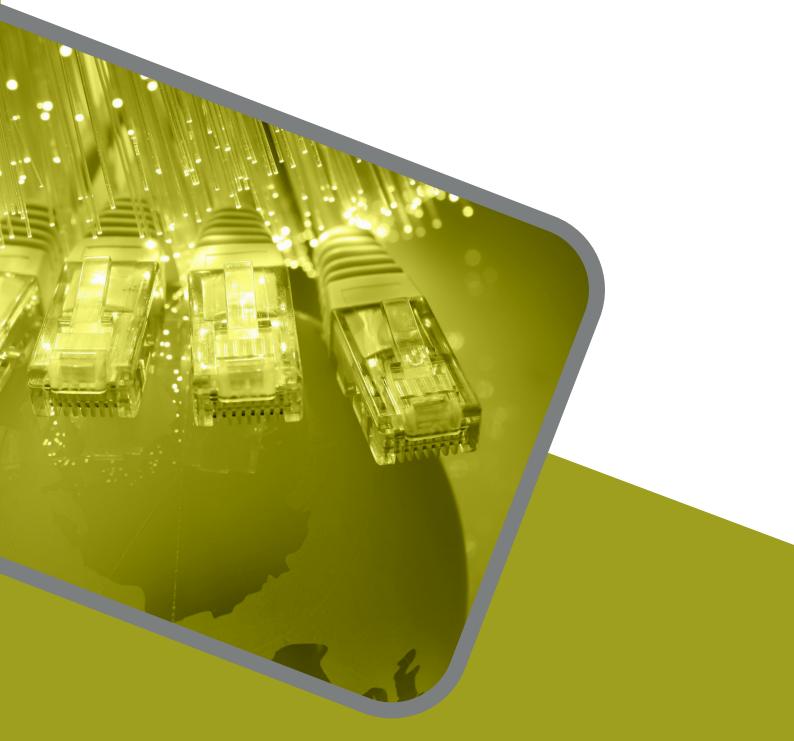
- ► Official Certification Certified Integrated Infrastructure Technician (CIIT®) certification
- Pearson BTEC Level 4 Professional Award
 Certified Integrated Infrastructure Technician

OR

External:

- Official Certification Certified Outside Plant Technician (COPT®) certification
- Pearson BTEC Level 4 Professional Award Certified Outside Plant Technician





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Contact CNet Training:

UK Tel: +44 (0)1284 767100

Web: cnet-training.com

Email: apprenticeships@cnet-training.com



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