

Technician



Certified Integrated Infrastructure Technician

BTEC Level 4 Professional Award



Customer Focused
Quality Driven

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

Certified Integrated Infrastructure Technician (CIIT®)

5 DAY PROGRAM

Combined

30% Theory 20% Case Study 50% Practical

Learner Profile

This program is designed for those wishing to extend their technical knowledge, further develop practical skill sets, with an aim to achieve a broader technical level capability, supported by professional qualification and certification.

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 Objectives

Successful learners will have the knowledge, competency and confidence to install and commission Smart Building technology devices.

On successful completion, learners will demonstrate the highest levels of technical skills and capability when installing wireless access devices, VoIP telephony, CCTV cameras, door access controls and biometric security systems.

Program Requirements

Learners are required to bring a webcam enabled laptop or suitable device with unrestricted wireless internet connectivity, the latest internet browser and suitable applications for reading/annotating PDFs and editing standard office documents.

Qualification

- ▶ Internationally and industry recognised BTEC Level 4 Professional Award Certified Integrated Infrastructure Technician

Certification

- ▶ Official Certified Integrated Infrastructure Technician (CIIT®) certification
- ▶ Use of CIIT post nominal title
- ▶ Use of the CIIT® 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

- ▶ Eligibility for an ECS (Electrotechnical Certification Scheme) Datacomms card
- ▶ Continual Professional Development (CPDs)
- ▶ 5 IEEE Continual Education Units (CEUs)

Certified Integrated Infrastructure Technician (CIIT®)

Program Overview

Take your existing network infrastructure skills to new technical levels, developing a “smart hands” approach to infrastructure delivery and gain a comprehensive knowledge of a range of intelligent devices that support smart building technical architecture.

The Certified Integrated Infrastructure Technician (CIIT®) program develops knowledge and practical skills required to deliver network infrastructure projects that include the installation and commissioning of intelligent network devices. It's a comprehensive five-day program perfect for those with at least two years of verifiable experience within the network infrastructure sector, or relevant qualifications and certifications in a wider project environment.

A certified CIIT® 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.

Learners will explore the effect of bandwidth demand on the network based on the operating parameters of a range of intelligent devices. In addition, the effects of power demand by Power over Ethernet (PoE) devices on the cable infrastructure will also be addressed.

Practical hands-on sessions are incorporated throughout this program, focusing on PoE network equipment architecture. Learners will also site and mount equipment to optimise coverage and direction, and will commission and configure devices into service. Such devices include wireless access points, AV systems, CCTV cameras, security control systems (both swipe access and biometric).

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

CIIT® Benefits for Individuals

- ▶ Develop an increased technical knowledge and capability
- ▶ Enhanced technical capability, able to deliver multi-disciplined projects
- ▶ Greater potential for variety and enhanced job satisfaction
- ▶ Industry recognised qualification and official certification

CIIT® Benefits for Benefits

- ▶ Investment in team development, improves morale and job satisfaction leading to greater staff loyalty
- ▶ Enhanced delivery portfolio, leading to greater opportunities when tendering for projects
- ▶ Take control of normally external dependencies
- ▶ Realise cost savings through greater efficiencies

Certified Integrated Infrastructure Technician (CIIT®) Topics

Role of the CIIT

- ▶ Understand “intelligent buildings and technologies”
- ▶ Select and prepare equipment for installation
- ▶ Install terminal equipment
- ▶ Commission terminal equipment
- ▶ Troubleshoot installations

Data-communications

- ▶ Binary coding
- ▶ Internet protocol
- ▶ IP addressing

Standards and Compliance

- ▶ BSEN 50173-6
- ▶ Legislation and regulation
- ▶ Compliance
- ▶ Warranties

Power over Ethernet

- ▶ Concept
- ▶ PoE standards and power ratings
- ▶ Power considerations and media selection
- ▶ PoE injection devices
- ▶ Network segregation

Virtual Local Area Networks

- ▶ VLAN structure
- ▶ Planning the VLAN
- ▶ Switch configuration
- ▶ Network security

Integrated Network Architecture

- ▶ PoE capable technology
- ▶ Bandwidth demand
- ▶ Planning
- ▶ Media considerations

Network Commissioning and Troubleshooting

- ▶ BSEN 50174 quality standards
- ▶ Network warranty
- ▶ Commissioning PoE channels

Practical Installation Tasks

- ▶ Prepare, install and commission
 - ▶ Access control devices
 - ▶ CCTV camera systems
 - ▶ Wireless access points
 - ▶ Audio visual systems
 - ▶ PoE Network Switches
- ▶ Configure devices
- ▶ Troubleshoot network failures

There is a final case study which challenges learners to plan and prepare their practical installation tasks.

