



The market leader Communications Training

Customer Focused ▶▶
Quality Driven ▶▶▶▶

ITS Technician (BICSI)

5-day course

Join the elite group of BICSI Technicians recognised the world over as highly skilled installation technicians & managers.

Expand your knowledge and get ahead in the telecommunications industry by attending this 5-day programme, the most advanced phase of BICSI Telecommunications Cabling Installation Training Programme. With the emphasis on the role and tasks of the experienced installation technician, this course looks at the techniques, standards, equipment and test methods that a technician requires to effectively supervise the correct installation and testing of telecommunications systems.

Course Overview

Structured premises cabling systems

- Entrance facilities, backbone, horizontal, work areas, equipment rooms, telecomms rooms, crossconnects, main, intermediate, horizontal cabling

Standards, code & methodologies

Plans & specifications overview

- Blueprints, construction specifications

Media characteristics

- Emerging technologies, overview of twisted pair (UTP, ScTP, STPA), colour codes, categories of cables, coaxial, optical fibre cables (single & multimode)

Connectors

- UTP, STP-A, ScTP, coaxial, optical fibre, connector pin configurations, colour codes

Transmission characteristics

- AC/DC review, analogue/digital signals, cable bandwidth (megahertz vs. megabits per second), digital signaling

Grounding, bonding & electrical protection

- Installation, design & testing

Defining LANS

- Characteristics, physical & logical typologies, Ethernet (thicknet, thinnet, 10BaseT, 100Base-T, token ring)

Components of LAN

- OSI model, LAN hardware & software

Safety

- Hazardous environments, personal protective equipment, safety practices

Professionalism

- Customer relations, communications skills, professional appearance
Preparation for installation – Space & pathway design, developing a job plan plus overview of performing a site plan, building closets, installing grounding & support infrastructure, preparing work area outlet locations

Laying cable

- Laying backbone & horizontal twisted pair cable, laying optical fibre cable
Firestopping - Responsibilities, systems, new & existing penetrations

Cable termination

- Termination of UTP, ScTP & fibre optic plus an overview of: pretermination functions (forming, dressing, fanning & labelling), termination hardware used includes Krone LSA high band, BIX, 66 blocks & the Universal Data Connector

Splicing cable overview

- Copper & fibre optic

Cable testing

- Copper cable testing & certification, using a light source & power meter

Cable troubleshooting overview

- Copper & fibre optic cables

Retrofits & system upgrades

- Identifying active circuits, performing cut overs

70% Theory 30% Practical



▶ **Qualification**
ITS Technician (BICSI) status
BICSI CECs: 12 ITS & 30 RCDD
CNet certificate

▶ **Who should attend**
Experienced telecommunications cable installers

▶ **Related Training**
BICSI RCDD
LAN Design & Implementation
Design & Advanced Testing of Copper Systems
Design & Advanced Testing of Fibre Systems

▶ **Course objectives**
Successful delegates are able to display a thorough understanding of installing, testing and troubleshooting cabling networks in a supervisory role

▶ **Prerequisites**
3 of more years of recent, verifiable cabling experience.

▶ **Course Materials**
Transport Systems Installation Manual (ITSIM) is required for classroom work and self study which should be obtained direct from BICSI.

▶ **Course Location**
Temple, Dublin