

Copper cabling for engineers

A 2 day **Hands on** training course



Description

A hands on training course covering installation, termination and testing of copper cables in an internal environment. The course covers all copper cabling but hands on sessions focus on unshielded Twisted Pair.



Key outcomes

By the end of the course delegates will be able to:

- ✓ Recognise different copper cables and when to use them.
- ✓ Install and terminate UTP cables.
- ✓ Test and certify UTP cables.



Training approach

This structured course uses Instructor Led Training to provide the best possible learning experience. Small class sizes ensure students benefit from our engaging and interactive style of teaching with delegates encouraged to ask questions throughout the course. Quizzes follow each major section allowing checking of learning. Hands on sessions are used throughout to allow delegates to consolidate their new skills.



Details

Who will benefit?

Professional cable installers.

Prerequisites

None

Duration: 2 days

Customer rating: ★★★★★

Generic training



Generic training compliments product specific courses covering the complete picture of all relevant devices including the protocols "on the wire".

"Friendly environment with expert teaching that teaches the why before the how."
G.C. Fasthosts

Small class sizes



We limit our maximum class size to 8 delegates; often we have less than this. This ensures optimal interactivity between delegates and instructor.

"Excellent course. The small class size was a great benefit..."
M.B. IBM

Hands On training



The majority of our courses use hands on sessions to reinforce the theory.

"Not many courses have practice added to it. Normally just the theoretical stuff is covered."
J.W. Vodafone

Our courseware



We write our own courses; courseware does not just consist of slides and our slides are diagrams not bullet point text.

"Comprehensive materials that made the course easy to follow and will be used as a reference point."
V.B. Rockwell Collins

Customise your course



Please contact us if you would like a course to be customised to meet your specific requirements. Have the course your way.

"I was very impressed by the combination of practical and theory. Very informative. Friendly approachable environment, lots of hands on."
S.R. Qinetiq

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Course content

Communications principles

Use of cables in data networks, Use of cables in telephone networks, conductors and insulators, current, resistance, voltage and Ohms law.

Copper cabling

Coaxial versus twisted pair. UTP and STP. Cat 5, 5e, 6 and 7. Straight through, cross over, others. Hands on: Building a simple network.

Cable termination

Preparing cables for termination, termination techniques, termination tools. Wiring standards, colour codes. Hands on: Making your own cables and using them in the simple network

Cable architectures

Structure cabling system components, topologies, horizontal wiring, vertical wiring, telecomms rooms, server rooms. Hubs, switches and routers implications. Trunking. Cabling documentation, symbols and abbreviations. Hands- on: punch blocks, testing continuity.

Cable installation

Site surveys: pathways and spaces, support structures, distance limitations. Recommended installation practices, laying and setup, retrofits. Health and safety factors, fire and building codes. Hands on: Performing a site survey, installing cable with floor boxes.

Testing

Basic testing, volt meters, tone set, Cat 5 testers, Cat 5e testers, Cat 6 testers. Certifying performance, Cat 5, 5e and 6 performance parameters. External factors. Common faults. Hands on: Testing an installation, troubleshooting faults.

Other aspects

Telephony cables, shielded cables. Hands on: installing telephone cable, testing continuity.

