

Telecoms Engineering

Course Name

Copper Telecoms Cable Testing

Course Description

Introduction

Features of telephone and other copper comms cabling and networks, network topologies

- Basic Electrical Theory

Voltage, current and resistance, SI units

- Signalling on Copper Comms Cables

Analogue and digital, frequency and bit rate, electrical characteristics of data cables, DC loop.

- Testing Scenarios & Configurations

Commission testing, maintenance & fault finding

- Using a Multimeter

Principles of tests, power, battery, earth, short circuit, contact and disconnections tests, multimeter setup, testing sequence

- Using a Tone Amplifier & Generator

Principles of tests, setup of equipment, locating cables

- Using a Ohmmeter (Bridge Megger)

Principles of tests, insulation resistance, loop resistance, test leads, instrument settings

- Using a Certification Tester

Principles of tests, setup of equipment, performance standards

- TDR Testing

Principles of TDR testing, analysis of TDR traces

- Analysis of Test Results

Ascertain line conditions and faults from multimeter, Ohmmeter & other test results

- Course Review

- Assessments

Practical assessment & short written tes

Audience

est engineers responsible for commissioning & acceptance testing of new installations • Maintenance staff (faultsmen) responsible for locating faults • Managers and engineers who are required to accept, interpret or understand test results N.B. A basic understanding of copper cable jointing is required for this advanced course

Duration: 3 Day(s) **Class Size:** 6

Competence Name Awarded

Undertake corrective and preventative maintenance of Telecomms cable systems. Telecomms Copper Cables - Fault Location & Routine Maintenance Testing

Competence Awarded

Tel 02.06

Course Code

Tel 02.06

Prerequisite Name

Prerequisite Short Code

Skills Assessment Scheme Regime

4

Course Type



Face to Face

Download Date: 10/1/2025