



# Fibre Optic Essentials for Electricians & Installers

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## **COURSE DESCRIPTION:**

This course will impart with lectures and practical exercises the knowledge and skills required to install the latest fibre optic and cabling in LAN & WAN environments. It covers safety, handling, installation, jointing, terminating and testing of Optical backbones and horizontal runs, helping to avoid costly installation errors caused when cables are incorrectly handled.

## **WHO SHOULD ATTEND:**

Electricians, Technicians, installation and maintenance engineers and anyone that has to install, commission or maintain Fibre Optic links & connected equipment.

## **SOME COURSE BENEFITS:**

- Be able to correctly install, terminate and test fibre cables.
- Be able to correctly install, pigtail splice and test OS2 & OM3 cables.
- Understand and comply with fibre safety standards
- Reduce maintenance calls due to incorrect installation & termination

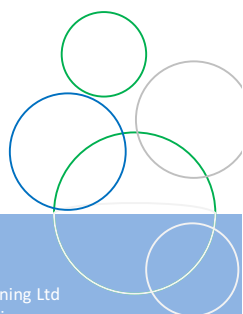
## **COURSE OBJECTIVES:**

- To clarify fibre optics technology, components and operation
- To explain singlemode and multimode implementations, cables, connectors, safety, handling & cleanliness
- Understand the applications for the different links & how to test them

## **FORMAT:**

1-day, interactive classroom based, with quizzes and hands on exercises.

Maximum attendees 12 per course





## CONTENT:

### BLUE = Practical Exercise

#### Morning

- The principles of light (simplifying the language)
- Fibre optic system basics
- Fibre safety considerations
- Single mode & multi mode fibres
- Dispersion and loss
- Fibre construction
- Fibre connectors
- Connector Colour Codes
- Fibre Cables
- Light Sources - LED's & Lasers
- Fibre Installation Techniques
- [Fibre Termination \(splicing practical\)](#)

#### Afternoon

- [Connector care and cleaning](#)
- Fibre Testing theory
- [Continuity Testing](#)
- [Visible Fault Locators](#)
- [Insertion Loss Testing using Light Source & Power Meters](#)
- OTDR Overview
- OTDR Results interpretation

#### Assessment (Optional for in-house courses)

- Multiple choice written test
- Instructor led interactive quizzes
- "Show what you know" group presentations

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