

# Fibre Optic Essentials for Electricians

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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 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 & cabling installers who want to expand their business portfolio to include the installation, commissioning and maintenance of fibre optic networks, links & connected equipment.

## SOME COURSE BENEFITS:

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

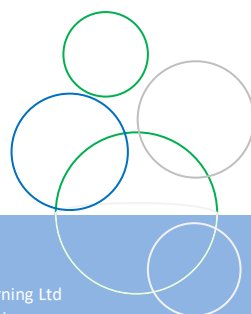
## COURSE OBJECTIVES:

- To understand fibre optic technology, terminology, components and operation
- To explain fibre optic circuits; cables, connectors, safety, handling & cleanliness
- Understand the applications for the different link types & how to test them

## FORMAT:

1-day, interactive classroom based, with a written test 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**
- **Live Fibre Identifier**
- **Visible Fault Locator**
- **Insertion Loss Testing using Light Source & Power Meters**
- OTDR Overview
- OTDR Results interpretation

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

- Instructor led interactive quizzes
- Multiple choice written test
- Practical Assessment

Delivered in association with

