

Fibre Optic cabling for engineers

A 3 day **Hands on** training course



Description

A hands on course covering installation, splicing and testing of fibre optic cabling.



Key outcomes

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

- ✓ Describe different types of fibre optic cable and where to use them.
- ✓ Install fibre optic cable.
- ✓ Splice fibre optic cable
- ✓ Test fibre optic cable.



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?

Cable installation professionals.

Prerequisites

None.

Duration: 3 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

Fibre optic transmission

Physics of light, optical modes, light propagation, light guiding, dispersion, light spectrum. Fibre versus copper comparison. Fibre cable types and their uses. WDM and DWDM.

Fibre optic cable

Single mode, Multi mode, diameters, step-index fibre, graded index fibre, loose tube, tight buffered, cable jackets, distance limitations. Indoor versus outdoors.

Fibre optic network components

ST, SC, FC and other connectors, termination methods, joint enclosures, transmitters, light sources, laser, LED, receivers, detectors.

Installation

BS.7718. Safe working practices. Site surveys, recommended installation procedures, cable handling issues, bending radius, techniques and tools, documentation.

Splicing

Joining fibres, splicers, fusion splicing, mechanical splicing, splicing procedure. Cleaving, splicing parameters. Splicing vs. connectors.

Measurement parameters and applications

Power measurement, loss measurement, return loss measurement, receiver sensitivity measurement. Budget calculations.

Testing

Optical power meter, optical light source, optical attenuator, return loss meter. Continuity testing, insertion loss testing, OTDR features and principles, OTDR capabilities and limitations. Using an OTDR. Troubleshooting.

