# OTDR Fundamentals & Testing

## COURSE DESCRIPTION:

This hands-on course gives a solid understanding of an Optical Time Domain Reflectometer. It will give technicians the essential knowledge to be able to configure, operate and interpret results using an OTDR, along with equipment specific info on saving configurations and results.

Note: You can bring your own OTDR to this training, or use one of ours.

## WHO SHOULD ATTEND:

Technicians, installation and maintenance engineers and anyone wanting to get the most from their OTDR.

## SOME COURSE BENEFITS:

• Be competent in performing tests and saving results
• Ensure compliance with design
• Reduce maintenance calls due to poor installation
• Locate faults faster

## COURSE OBJECTIVES:

• Understand the principles essential to operating an OTDR
• Understand the theory & process for fibre testing
• Understand the effect of OTDR configuration parameters
• Be able to identify & locate events on a fibre using an OTDR
• Be able to create and export reports from your OTDR

## FORMAT:

1-day, interactive classroom based, with quizzes and hands on exercises.
Maximum attendees 10 per course

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**CONTENT:**

**Morning**
- The principles of light (related to OTDR's)
  - light velocity
  - reflection
  - refraction
  - dispersion
- Singlemode & Multimode considerations
- Fibre Testing theory
  - Dead Zones
  - Launch & receive leads
  - Insertion Loss
  - Fusion Splices
  - Mechanical Splices
  - Connectors
  - Ghosts & Gainers
- OTDR Parameters
  - Index of refraction
  - Helix factor
  - Range
  - Pulse Width
  - Wavelength
  - Averaging or duration
- OTDR Navigation
- OTDR setup and operation
- Connecting to a Fibre
- Obtaining a "good" trace
- Basic OTDR results analysis and troubleshooting

**Afternoon**
- Hands on fibre testing and fault location
- Advanced OTDR setup and operation
- Advanced OTDR results analysis and troubleshooting
- Test result storage and handover documentation

To find out more about this course, contact CoverTel Services on
**info@covertel.com.au** or telephone **1800 COVERTEL** (1800 268 378)
Delivered in association with CommsLearning

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