



# Koinonia Academy



## Course Overview:

This course covers fiber optic testing and measurements techniques. The course elaborates on fiber optic characterization services including Optical Time Domain Reflectometer (OTDR), Power Meter and Light Source Testing (PM/LS).

Splicing Machine types and testing of splices is covered to troubleshoot high losses and measure the loss. OTDR trace analysis is covered in detail for fiber events including attenuations, splices, connectors, gainers ...etc. Trainees will get intensive practice to gain the essential knowledge to configure, operate, and interpret results using OTDR for commissioning and troubleshooting fiber networks and generating test reports.

## Course Objectives:

**Upon completion of the course, participants will be able to understand:**

- International standards for fiber testing
- Site Acceptance Test SAT
- Choosing appropriate test instruments
- Principle of operation of Optical Time Domain Reflectometer (OTDR)
- Perform measurements with the OTDR for troubleshooting or acceptance testing
- Interpret and analyze OTDR measurement results effectively
- Configure the OTDR correctly to prevent measurement errors
- Perform Power Meter and Light Source Testing (PM/LS).
- Gain practical experience through hands-on measurements on various fiber types
- Splicing Machine types and gain good practice on fiber splicing and termination

**Target Audience:** This course is designed for

- Communication and Network Engineers.
- Technicians who perform installation and maintenance measurements

**COURSE NAME: OPTICAL  
FIBER ADVANCED  
TESTING AND  
MEASUREMENTS**