

Course Name: WDM/DWDM Fundamentals

Course Overview: This course is an introduction to Wave and Dense Wave Division Multiplexing. Emphasis will be covering basic concepts, equipment and common impairments.

Course Length: 1 day

Who should Attend:

- Field service technicians
- Design engineers
- Managers/field supervisors
- Field engineers
- Installers
- Telecom technician

You will Learn:

- WDM Components
- Laser Types
- WDM types
- Benefits and Impairments

Prerequisites: None

Customizable Course: Yes



Course Content:

Fiber Communication Fundamentals

- SONET Overview
- WDM vs. TDM

Industry Overview

- Applications, Advantages and Disadvantages

Overview of Laser Types

- Laser Tuning

Wavelength and Spectral Width

Fiber Capacity

- Bandwidth and distance limitations

WDM Types

- Benefits of Using WDM

DWDM Architecture

Explanation of WDM and DWDM Operation

WDM Components

- Optical Terminal Multiplexers (OTM)
- Optical Multiplexers (OADM)
- Optical Amplifiers
- Erbium Doped Fiber Amplifiers (EDFA)
- Transponders and Combiners
- Hubs
- Optical Cross-Connects

CWDM Comparison and Overview

Impairments in Optics

- CD and PMD