

# Optical Transport Systems

<b>Course Length</b>	2 days
<b>Course Code</b>	1375
<b>Prerequisites</b>	None.
<b>Course Overview:</b>	This training course will focus on fiber optic transport technologies. Time will be spent talking about optical cables and the technologies that traverse them.

*\* This course can be customized or combined to meet specific system requirements\**

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## Course Outline

### Fiber Optics Overview

- Optics
- Industry
- Growth Potential

### Background Review

- DS0/Low Speed Technologies
- T-Carrier Systems (T1, T3)
- Multiplexing Techniques

### Fiber Optic Cables

- Glass v/s Plastic
- Light Sources
- Multimode v/s Single Mode
- Connector Types
- Standards/Specifications
- Cable Performance
- Loss and Dispersion
- Care and Cleaning



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## Fiber in the WAN

- Backbone Systems
- Carrier Systems

## SONET

- Building the Signal
- STS
- OCx
- Overhead Functionality
- Basic Speeds/Rates
- SONET Equipment
- Linear Systems
- SONET Rings

## WDM/CWDM/DWDM

- Building the Signal
- A different way of Multiplexing
- Basic Speeds/Rates
- Equipment
- Systems/Networks

## Passive Optical Networking (PON)

- Optics in the Last Mile
- Basic Speeds/.Rates
- Equipment
- PON with DSL
- Systems/Networks

## Fiber in the Future

- New Technologies
- Exploring the limits of Fiber