

Course Name: Optical Transport Systems

Course Overview: This training course will focus on fiber optic transport technologies. Time will be spent talking about optical cables and the technologies that traverse them.

Course Length: 2 day

Who should Attend:

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

You will Learn:

- Basics of the optical industry
- About the technologies that travel on fiber optics
- Basics of fiber optic cables
- Fiber Optics and the WAN

Prerequisites: None

Course Fees:

- 2 day course at a TESSCO Location \$950 per person
- 2 day course at your location \$6,000 for up to 10 attendees

Customizable Course: Yes

Course Content:

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

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