



Setting the Standards

2021 Training Classes



Fiber Optics Basic & Advance Course

This four-day class has been developed with 16 hours of classroom lecture and 16 hours of hands-on skills labs to provide practical understanding and skills required to properly design, install, and maintain fiber optic networks. Applicable for fiber optic communications systems in Telco, Broadband, and Premises (LAN) applications.

Course Level

Introductory to intermediate. Beginners to experienced fiber technicians find the class and extensive hands on skills training beneficial.

Course Options

Four days – Classroom lecture and hands-on exercises

Course Contents

- Introduction to the Fiber Optic
- What Is Fiber Optics?
- Fiber Manufacturing Methods
- Fiber Advantages
- Fiber Design
- Light Propagation Principles
- How Fiber Works
- Refraction & Reflection
- Fiber Types:
 - OM1, 2, 3, & 4
 - SM G.652 to G.657
- G.655 & G.652 Compatibility
- Cutoff Wavelength
- Numerical Aperture
- Mode-Field Diameter
- What is an Optical Network?
- Laser Transmission System Theory
- Transmitters and Transceivers
- Optical Modulation
- Optical Fiber Parameters
- Transmission bands
- Coarse Wave-Division Multiplexing
- Dense Wave-Division Multiplexing
- Fiber Attenuation and its Causes
- Scattering and Absorption
- Inter Modal and Chromatic Dispersion
- Polarization Mode Dispersion
- Mode-Conditioning
- Amplifiers
- Attenuator

Certification

OXIN Fiber Optic Installer



Complete the four-day Fiber Optics course and then successfully pass the Fiber Optic Installer (FOI) certification exam. The FOI is designed for those working with both multimode and single-mode fibers.