



*Mobile Training & Education Inc*

**"Anytime, Anywhere Training at its BEST"**

## Optical Telecommunications Installer

**LENGTH:** 20 hours delivered over day, evening or weekend hours

### **DESCRIPTION:**

The Fiber Optic Installer Certification course covers beginner level topics for voice, video and data.

Included are hands-on experience and the ability to successfully install, test and troubleshoot fiber optic cables and systems. Students will terminate a variety of ST, SC, and FC and connectors

and will be trained in performing mechanical splices. Principles of fusion splicing and the use of Optical Time Domain Reflectometer (OTDR) are included.

### **PREREQUISITES:**

No previous experience within the industry is required to attend.

### **ELIGIBLE CERTIFICATIONS:**

ETA (Electronics Technicians Association) - Fiber Optic Installer exam

### **OUTLINE:**

Through hands-on training, students learn the vendor-neutral skills necessary for pursuing or advancing a career in Fiber Optic Installation. Upon completion of this course, the student will be able to:

- Discuss the history of fiber optics
- Explain the advantages of using fiber optic systems instead of conventional copper wire or coax cable systems
- Define the principle parts of a fiber optic link
- Describe the light guiding principles of fiber optic transmission
- Explain the manufacturing process for producing optical fiber
- Detail the operating wavelengths typically used in optical fiber
- Describe the cause and affect of attenuation in optical fiber
- Discuss cable types and the National Electrical Code (NEC)
- Understand the current industry assembly methods
- Identify the components of an optical fiber connector
- Identify and discuss typical safety practices for fiber optics
- Understand and identify the tools and materials necessary to support fiber optics
- Build a multimode optical fiber cable component (OFCC) using 3M hot melt SC and ST connectors
- Build a multimode OFCC using an anaerobic adhesive AMP SC and two-part epoxy adhesive on a 3M ST connector
- Build a single mode OFCC using ST and FC connectors and two-part epoxy, meeting TIA/EIA standards
- Perform a mechanical splice using a 3M FiberLok
- Perform continuity testing and troubleshooting using a visual fault locator (VFL)
- Perform link loss testing and troubleshooting using a light source and power meter in accordance with ETA-526-14A