# CERTIFIED FIBER OPTICS TECHNICIAN COURSE (CFOT)



Course Description: This introductory 3-day (appx.)\* fiber optic tech course is designed for anyone interested in becoming a Certified Fiber Optic Technician. This Fiber Optic Training combines theory and 85% hands-on activities to prepare the student to take the CFOT (Certified Fiber Optic Technician) test that is sanctioned by the FOA (Fiber Optics Association) and given and graded the final class day. This course also *introduces the student to industry* standards governing FTTD (Fiber To The Desk), FTTH (Fiber To The Home), and Distribution Cabling. Students will learn how to identify fiber types, recognize various connectors used in fiber installation; and install, terminate, splice, and properly test installed fiber cable to existing standards. This program explores the history and future of fiber optics and fiber optics capabilities, and basic testing and troubleshooting. Anyone interested in becoming a Certified Fiber Optics Technician should attend this class. Course fee includes study materials, exam fees, and Text Book.

Course Objective: Program prepares the student to take the CFOT (Certified Fiber Optics Technician) exam given and graded at the end of class. Student will be able to effectively and efficiently install, terminate, and test multimode or singlemode fiber optic networks to existing standards.

**Prerequisite**: Able to see, identify and manipulate small items and be able to read and speak the English language.

# METHOD OF ASSESSING WHETHER COURSE OBJECTIVE WAS MET:

Along with chapter tests, class discussions, and substantial handson activities, the CFOT exam is given and graded at the end of the class. Students will demonstrate the ability to build and test and troubleshoot a fiber optic LAN network.

**Instructor(s)**: As assigned by BDI DataLynk, LLC. See our instructor's credentials at www.bdidatalynk.com

**Contact (Instructional) Hours**: 24 Hours (Approximately)

Location: To Be Determined

Tools/Instructional Materials Needed: A Projection Screen for Power Point presentations, a chalk or "white" board, Tables and chairs (no small desks please). We provide, fusion splicers, test equipment including power source meters and OTDRs as well as hand tools and consumables for each student to use during class.



Particular Physical Demand(s) on student: Students must be able to see, manipulate, and hold small tools and test equipment. Students must be able to read and speak the English language. Students must have the ability to announce to anyone in the classroom that lasers are about to be turned on or are currently on and active. Further, student must be able to hear and react to the announcement from anyone in the classroom that lasers are about to be turned on or currently active. Finally, students considering this, or any other fiber optics course must understand that, because of safety issues in dealing high-power lasers and microscopes, the ability to communicate these important announcements to co-workers and the ability to hear and react to these announcements from co-workers is required once in the field working in this industry.

**Textbook**: Fiber Optics Technician's Reference Manual by Jim Hayes. Supplementary study materials, and Student Lab Manual. Course fee includes all study materials, consumables and exams.

#### Course Schedule:

### Day- 1:

- Introduction to Fiber Optics
- Fiber To the Desk
- Fiber To The Home
- Multimode Fiber Optics Networking
- Fiber Optics Safety
- Hands-on Session Begins Anaerobic Polishing Procedures. Basic patch cable assembly, testing, troubleshoot, and repair.

#### Day - 2:

- Fiber Optics Networking Standards
- Fiber Optics Cable and Connector Identification.
- Outside Plant Cable Introduction
- Hands-on Session Continues —
   Termination of Fiber Connectors, Introduction to
   Splicing (Mechanical & Fusion). Introduction to fiber
   optics network troubleshooting. Students will begin
   installation of MM fiber optics network using 12 fiber distribution style cable with SC and ST
   connectors.

## Day - 3:

- Outside Plant Fiber Cable preparation, termination & testing -Demonstration.
- Hands-On Session continues.
  Students must build, test and troubleshoot actual multimode fiber optics network according to industry standards.
- Introduction to Basic OTDR Functions and Traces
- Use of the OTDR, VFL, Power Source and Light Meter Functions
- Continuity Testing, Troubleshooting, Managing Tools and Equipment
- Written and Hands-On Exam review session (Students must pass both the written and the hands-on exams)

