

# Certified Fiber Optic Specialist Outside Plant (CFOSO)



*This 2-day, 16 hour (\*appx) fiber optic specialist course is for students who will be directly involved with installing Outside Plant (OSP) Fiber Optics Cabling. Further, it is an add-on course to their FOA portfolio once they have successfully completed the 3-day, basic CFOT course and can be taken concurrently with the CFOT course. This advanced Fiber Optic Training combines lecture sessions and 85% hands-on activities to prepare the student to take the CFOS/O, OSP hands on and written exams that are sanctioned by the FOA (Fiber Optics Association) and given and graded the final class day. This course introduces the student to industry standards governing the installation, testing, and troubleshooting of OSP fiber optics cable – used in the Outside Plant Rugged Environment. Students will learn how to properly identify OSP fiber cabling types, recognize various outside plant closures used in OSP fiber installation, install, prepare, terminate, splice, and thoroughly test and troubleshoot installed OSP fiber cable to existing standards. Hands-on activities include both mechanical and fusion splicing. Course fee includes study materials, Text Book and exams and 3-year membership to the FOA. Note: The student must pass both the written and hands on exams to successfully pass this course.*

**Course Objective:** Program prepares the student to take the Fiber Optics Specialist Outside Plant (OSP) Certification Exam (Written and Hands-On) given at the end of class. Student will be able to effectively and efficiently troubleshoot, test, identify, and repair OSP fiber network cabling, and provide QA (Quality Assurance) procedures to minimize or eliminate future network outages.

**This course is recognized by The US Department of Labor and is sanctioned by the Fiber Optic Association (FOA)**

**Prerequisite:** FOA CFOT Course. As of January 1, 2015, the student MUST have successfully passed the basic CFOT course within the preceding 12 months or have renewed their FOA membership within that time frame prior to attending the CFOS/T, CFOS/S, and/or the CFOS/O FOA Specialist courses offered by BDI DataLynk. There are no exceptions. Students are encouraged to register for all courses being offered at the individual locations with the understanding that the CFOT is the prerequisite for all other courses and it must be successfully completed first prior to attending any of the other specialist courses.

## **METHOD OF ASSESSING WHETHER COURSE OBJECTIVE**

**WAS MET:** Along with chapter tests, class discussions, and substantial hands-on activities, the CFOS/O exam (both written and practical) is given and graded at the end of the class. Students will receive a certification at the end of the program which is sanctioned by the Fiber Optic Association.

[www.bdidatalynk.com](http://www.bdidatalynk.com)

**Instructor:** As assigned by BDI DataLynk, LLC. See our instructor’s credentials at [www.bdidatalynk.com](http://www.bdidatalynk.com)

**Contact (Instructional) Hours:** 16 Hours\*

*\*Actual hours may vary depending on number of students.*

**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 should be physically able to see, identify, install, and test fiber optics connectors safely and efficiently. Must be able to manipulate small hand tools. 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:

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#### Day– 1:

- Introduction: OSP Plant Cabling
- OSP Cable Preparation
- Installation of Fan Out Kits and Connectors
- Hands On activities begin. Students are required to build, troubleshoot and test an actual, outside plant fiber optics cabling system using armored OSP cable. Must be able to demonstrate both mechanical and fusion splicing techniques in addition to cable preparation procedures and installation into industry recognized OSP splice closures.
- Closures: Types and Hardware
- Splicing: Mechanical and Fusion
- Preparation and Cleaning of OSP Cable

- Fiber Optics Safety
- Study Question Review Session

#### Day-2:

- Hands On Session Continues
- OTDR, OLTS, VFL Procedures
- OSP Fiber Plant Testing, Troubleshooting and Repair
- Study Question Review Session
- **Written and Hands-on Exams: Students must pass both written and hands-on exams to receive FOA Certification.**
- Certificates issued to successful students.