

CSIR 1042

Course syllabus

1. Name of Course:

Certified Fiber Optics Specialist/Testing & Maintenance (CFOS/T)

2. Number of clock hours:

16 hours

3. Course Description:

This 2-day (16-hour) program is designed to offer advanced training to anyone involved with the testing and maintenance of fiber optics networks. A focal point in the program is to offer a general, easy to understand, approach to fiber optics testing standards with little theory and considerable hands on activities. This comprehensive program explains the variety of testing standards, equipment and technological approaches used in fiber network testing and splicing and how to choose among them. This 75% hands on course explores the overall spectrum of testing and maintenance of single and multi mode fiber optics networks and provides a detailed overview and demonstration of various pieces of equipment used in testing and maintenance. Subject matter includes a detailed study of ANSI/TIA/EIA-526-14(7)A, OTDR fundamentals and uses, OTDR vs. Insertion Loss Testing, Return Loss Testing, and Attenuation testing using the Power Source and Light Meter. **This course is BICSI Recognized for 14 CECs (Continuing Education Credits) for RCDDs and 12 CECs INS, Level 2/Technician.**

Course Objective: Program prepares the student to take the Advanced Fiber Optics Certification Exam given at the end of class. Student will be able to effectively and efficiently identify fiber network defects, and provide QA (Quality Assurance) procedures to minimize or eliminate future network outages.

Suggested Prerequisite: CFOT Course or another Formal Fiber Optics Training Course within preceding 6 months, or 1 Year Fiber Optics Related Experience. Note: Anyone can attend and successfully complete this program. However, those wishing to become registered with the FOA as a Certified Fiber Optic Specialist in Testing (CFOS/T) must have taken and passed the Basic CFOT Exam.

METHOD OF ASSESSING WHETHER COURSE OBJECTIVE WAS MET:

Along with chapter tests, class discussions, and substantial hands-on activities, the Advanced Fiber Optics Certification Test is given and graded at the end of the class. Students will receive a Certificate of Completion upon successful completion of the program.

Instructor(s): Bob Ballard, RCDD, CFOS, CFOI. Contact phone number: 512-785-9024, Email: bob@bdatalynk.com

Contact (Instructional) Hours: 16 - Hours

Location: Your Facility - Classroom must be available for the duration of the course.

Tools/Instructional Materials Needed: A Projection Screen for Power Point presentations, a chalk or “white” board, Tables and chairs (no small desks please).

Particular Physical Demand(s) on student: Student should be physically able to see, identify, install, and test fiber optics connectors safely and efficiently.

Maximum Number of Students: 16

Minimum Number of Students: 6

Textbook: Fiber Optics Technician’s Manual, 3rd Edition by Jim Hayes, Supplementary Study Materials Include Workbook and Student Lab Manual. Course fee includes all study materials and consumables. See BDI Web site at www.bdidatalynk.com for complete textbook description.

Terms of Payment: *Net 15 Days*. Unless otherwise agreed upon, BDI DataLynk will submit an invoice to reflect number of attending students at the end of the course.

Course Schedule

Day – 1:

- Introduction to ANSI/TIA/EIA-568-B.3, Optical Fiber Cabling Components Standard.
- A review of fiber optics safety procedures
- Comprehensive overview of ANSI/TIA/EIA-526-14A
- Hands-on activities demonstrating EIA/TIA 526-14A and – 7 (OFSTP-14 & -7) and emergency cable repair using connectors, and mechanical and fusion splicing procedures.

Day – 2:

- Begin Practical (hands-on) Exam
- Introduction to OTDR Functions,
- Use of the OTDR, Power Source and Light Meter Functions,
- Fiber Identifier,
- Continuity Testing,

- Tools and Equipment,
- Safety,
- Class Discussion,
- Administer and Grade Advanced Test
- Test Results & Review, Conclusion