

CSIR 1052

Course syllabus

1. Name of Course:

Certified Fiber Optics Technician

2. Number of clock hours:

24 hours

3. Course Description:

This introductory 3-day fiber optics course is designed for anyone interested in learning basic fiber optic networking. This program combines theory and 75% hands-on activities to prepare the student to take the CFOT (Certified Fiber Optics 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), LAN/WAN fiber networks, and further introduces the student to basic fusion and mechanical splicing. 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 cost of installation. Standards covered: NECA/FOA-301-2004, EIA/TIA 568-B.3, ANSI/TIA/EIA 607-A, and NEC Article 770-50, Anyone interested in becoming a Certified Fiber Optics Technician should attend this class. Upon successful completion, **this program is recognized for BICSI CECs (Continuing Education Credits): RCDD 21, Installer Level/2 Technician 12 CECs. Course fee includes all books study materials.**

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/singlemode fiber optic networks.

Suggested Prerequisite: Basic working knowledge of computers. Able to see and identify small items and able to speak and understand the English language.

METHOD OF ASSESSING WHETHER COURSE OBJECTIVE WAS MET:

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

Instructor(s): As assigned by BDI DataLynk

Contact (Instructional) Hours: 24 - 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). 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: Student should be physically able to see, identify, install, and test fiber optics connectors safely and efficiently. Students must be able to read and speak English.

Maximum Number of Students: 16

Minimum Number of Students: 6

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

Course Schedule:

Day – 1:

- Introduction to Fiber Optics
- History and Future of Fiber Optics Networking
- Fiber To the Desk
- Fiber To The Home
- K-12 Fiber Optics Networking
- Fiber Optics Safety
- Hands-on Session Begins

Day – 2:

- Fiber Optics Networking Standards
- BICSI, RCDD Certification, CFOT Certification
- Fiber Optics Cable and Connector Identification.
- Outside Plant Cable Introduction.
- Hands-on Session Continues –

Termination of Fiber Connectors, Splicing (Mechanical & Fusion), Design & Installation of Fiber Cabling, Introduction to Splicing

Day – 3:

- Outside Plant Fiber Cable preparation, termination & testing. Practical Hands-On Exam (Fiber Network Testing and Trouble Shooting)
- Introduction to Basic OTDR Functions,
- Use of the OTDR, Power Source and Light Meter Functions
- Continuity Testing, Tools and Equipment
- Safety
- Class Discussion
- Administer and Grade Written CFOT Test
- Test Results & Review, Conclusion