

Collin College - Continuing Education

COURSE SYLLABUS

COURSE INFORMATION

Course Number: FIBR 7375

Course Title: Certified Fiber Optics Technician (CFOT)

Course Description:

This 3-day fiber optics course is designed for anyone interested in becoming a Certified Fiber Optics Technician. This program combines theory and 85% hands-on activities to prepare the student to take the CFOT (Certified Fiber Optics Technician) test, sanctioned by the FOA (Fiber Optics Association). The test is given and graded the final class day.

This course also introduces the student to the following 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. Hands-on session will include multimode ISP cable. Students will learn the basics on how to identify fiber types, recognize various connectors used in fiber installation; and install, terminate, splice, and properly test installed ISP fiber cable to existing standards. This program explores the history and future of fiber optics and fiber optics capabilities.

Standards covered: Introduction to ANSI/EIA/TIA 568 Standards, NECA/FOA-301-2004, EIA/TIA 568-B.3, ANSI/TIA/EIA 607-A (Ground & Bonding), and NEC Article 770-50.

Additional supplemental study will include both mechanical and fusion splicing techniques along with actual OTDR trace sessions.

Course fee includes all books study materials and 1-year membership to the FOA.

Suggested Course Prerequisite(s): Basic working knowledge of computers. Able to see and identify small items and be proficient in speaking and understanding the English language.

Course Resources: None

Student Learning Outcomes: Program prepares the student to take the CFOT (Certified Fiber Optics Technician) exam given and graded at the end of class. Student will learn to effectively and efficiently install, terminate, and test multimode or single mode fiber optic networks to existing standards.

Certification Notes: Program prepares the student to take the CFOT (Certified Fiber Optics Technician) exam given on the last class day.

Next course recommendation:

Certified Fiber Optics Specialist-Testing/Maintenance (CFOS/T).
Certified Fiber Optics Splicing Specialist (CFOS/S)

Refund Policy: Please refer to www.collin.edu/ce/inforegistrar.html for our refund policy. No refunds after the start time of the first class.

Americans with Disabilities Act: Collin College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal opportunity. It is the student's responsibility to contact the ACCESS office, SCC-D140 or 972.881.5898 (V/TTD: 972.881.5950) to arrange for appropriate accommodations. See the current *Collin Student Handbook* for additional information.

Course Sessions: Listed are guidelines to indicate all topics that will be covered during your course. Do not plan your personal calendar based on these sessions. Your instructor will give you a calendar for your class that will indicate specific topics, assignments, and days.

Lesson Plan – by week or session:

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.)

Method of Evaluation: Unless otherwise stated, course completion is evaluated on the basis of attendance. Students must be in attendance 90% of each course in a certificate series for successful completion and to earn a certificate as specified.