



## Certificate in Fiber Optic Support

**Overview:** This introductory 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.

**Certificate Duration:** 40 hours

**Program Tuition:** \$1,800.00

**Books and Supplies:** 40.00

**Prerequisites:** None

### **Certificate Requirements:**

#### **Fundamentals of Fiber Optics**

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2102-1 Introduction to Fiber Optics

2102-2 Fiber Optic Jargon

2102-3 Fiber Optic Communications

#### **Intermediate Fiber Optics Multimode Fiber and Cables**

2102-4 Fiber Optic Transmission Systems and Components

2102-5 Optical Fiber

2102-6 Why Optic Communications

#### **Advanced Connector and OTDR**

2102-7 Connectors and Splices

2102-8 Fiber Optic Testing

2102-9 Fiber Optic Network Design

2102-10 Fiber Optic Network Installations

### **2102-1 Introduction Fiber Optics**

*This class teaches the student the basic concepts about working in the fiber environment. The class will cover the history of fiber and basic uses like fiber to home and fiber to desk concepts.*

**Prerequisites:** *This class has no formal prerequisites. The student should have a basic understanding of computers and networks.*

### **2102-2 Fiber Optic**

*This class teaches the student the basic concepts about fiber optic networking and fiber optic security and begins the hands on lab portion of the series.*

**Prerequisites:** *The student must have taken the 3300-1 class.*

### **2102-3 Fiber Optic Communications**

*This class teaches the student the basic concepts about fiber optic networking standards and covers the FOA-CFOT, connectors, and splicing.*

**Prerequisites:** *The student must have taken the second class in this series (3300-2).*



#### **2102-4 Fiber Optic Transmission Systems and Components**

*The student will cover some design concepts and begin the lab for basic splicing.*

**Prerequisites:** *The student must have taken the 3300-3 class.*

#### **2102-5 Optical Fiber**

*This class will cover cable and connector identification along with outside plant introduction.*

**Prerequisites:** *The student must have taken the 3300-4 class.*

#### **2102-6 Why Optic Communications**

*This class will cover OTDR functions and provide an overview of the uses of fiber.*

**Prerequisites:** *The student must have taken the 3300-5 class.*

#### **2102-7 Connectors and Splices**

*This class will reinforce the standards for splicing and how to work with different connectors. This class will be mostly lab work with hands on splicing.*

**Prerequisites:** *The student must have taken the 3300-6 class.*

#### **2102-8 Fiber Optic Testing**

*Now that the student is learning to splice he must be able to test both his work and existing lines. This class will take the student through the hands on process of testing Fiber.*

**Prerequisites:** *The student must have taken the 3300-7 class.*

#### **2102-9 Fiber Optic Network Design**

*This class teaches the student the in depth techniques of designing a fiber optic network. It includes a safety review.*

**Prerequisites:** *The student must have taken the 3300-8 class.*

#### **2102-10 Fiber Optic Network Installations**

*This class provides a quick review of the materials and concludes with the FOA exam. This is an industry exam and is part of this class.*

**Prerequisites:** *The student must have taken all the 3300-1/9 classes.*