

FIBER OPTICS SERIES - PART 1

OVERVIEW

This 30 hour course focuses on designing, testing, installing, and troubleshooting Fiber Optic cable plants and networks. Participants will benefit from interactive lecture, video presentations and Fiber Optic Lab kits all designed to reinforce the fundamentals of Fiber Optic Technology.

OBJECTIVES

After completing this course, participants will be able to:

- · Discuss the history and basics of fiber optics
- · Demonstrate understanding of fiber optics usage in industry
- · Prepare fiber optic cable
- Terminate fiber optic cable
- · Test fiber optic cable

FORMAT

The 30-hour course may be delivered in a variety of formats, depending upon the client's request. We recommend ten, 3-hour sessions.

SPECIAL FEATURES

- Experiential project labs
- Modular designed workbooks for quick scanning
- Interactive course delivery

BENEFITS

- · Participants gain foundational understanding of fiber optics.
- Participants obtain real-world application of fiber optic processes.



FUSION SPLICING - Part 2

OVERVIEW

This course provides a hands-on introduction to fiber fusion splicing. Topics include fiber preparation, alignment, splicing, and testing methods. Lab sessions will provide the participant with an opportunity to practice making fusion splices and to practice testing each splice, replicating actual field installation practices.

OBJECTIVES

After completing the course, participants will be able to:

- · Define common fusion splicing terms
- Discuss reasons to perform fusion splice between two cables
- · Compare mechanical splicing and fusion splicing
- · Operate a fusion splicer
- Measure splice loss by OTDR
- · Troubleshoot problems that occur in fusion splicing

FORMAT

The 18-hour course may be delivered in a variety of formats, depending upon the client's request. All sessions use an interactive style of facilitation.

SPECIAL FEATURES

- Experiential labs
- Interactive course delivery
- Hands on skill building

BENEFITS

- Participants gain experiential understanding of fusion splicing and related equipment.
- Participants obtain real-world application of fiber optic processes.



FTTX CONCEPTS - Part 3

OVERVIEW

This course presents fundamental passive optical network (PON) concepts, providing students with the tools needed to understand, design, and build these new access networks. The course discusses descriptions of PON and fiber-to-the-X (FTTX) alternatives to their application, fiber-to-the-premises (FTTP) networks, and essential measurement and testing procedures for network installation and maintenance.

OBJECTIVES

After completing the course, participants will be able to:

- Discuss the growing need for FTTX networks
- Discuss fiber-to-the-premises using Passive Optical Networks
- Identify the components and specifications of a typical PON network
- Discuss advantages and disadvantages of FTTX architectures
- Discuss FTTX cable plan design and implementation requirements
- · Describe measurement techniques and troubleshooting guidelines for FTTX links
- Explain the handling, care, and safety requirements of FTTX

FORMAT

The 18-hour course consists of lectures using PowerPoint presentations, demonstrations, and lab activities including test procedures specific to FTTX testing.

SPECIAL FEATURES

- Experiential labs
- Interactive course delivery
- Hands on skill building

BENEFITS

- Participants gain experiential understanding of different standards and architectures that enable fiber deployments to end users.
- Participants obtain real-world application of FTTX networks.

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