Hands-On

OSP Overview for Engineering and Planning

Course Description

An overview geared to give a Hands-On understanding to Engineers and Planners who are working with contractors and vendors.

Topics Covered in this course are

1. Safety
2. Splicing Tools and Techniques
3. Cable Prep for Splicing
4. Inside a Cable
5. Inside a Splice Case
6. Repair Strategies and Considerations
7. Aerial OSP Plant Maintenance
8. Building Entrances and Termination Methods
9. Underground OSP Plant Maintenance
10. Testing & Troubleshooting Methods
11. Questions and Review

Students Will Learn

- **Safety**
- **Splicing Tools and Techniques**
- **Cable Prep for Splicing**
- **Inside a Cable**
- **Inside a Splice Case**
- **Repair Strategies and Considerations**
- **Aerial OSP Plant Maintenance**
- **Building Entrances and Termination Methods**
- **Underground OSP Plant Maintenance**
- **Testing & Troubleshooting Methods**

Target Audience

An overview geared to give a Hands-On understanding to Engineers and Planners who are working with contractors and

vendors.

Prerequisites

A basic understanding of Telecommunications.

Course Outline

Day 1 & 2

1. Splicing tools and techniques : Lab: Splice fibers
   a. Cleaver
   b. Splicer
   c. Cleaning
   d. Tray management

2. Cable Prep for Splicing: Lab Cable Prep

3. Inside a cable
   a. Types and counts
   b. Sheath
   c. Armor
   d. Strength Member
   e. Tubes
   f. Fibers

4. Inside a splice case
   a. Types of cases
   b. Trays

c. Sealing

d. Locating correct fiber

e. Bare fiber OTDR testing

f. Attachment

5. Repair Strategies and Considerations

a. Damage extent

b. Slack Loops

c. New section

d. Mid-Sheath Splice

e. Fiber Roll

6. Types of damage

a. Burns

b. Snags

c. Chews

d. Wind

e. Lightning

f. Macro/Micro Bends

Day 3

7. Aerial OSP Plant Maintenance Lab: Field Trip

a. Cable Heights

b. Lashings

c. Downguys

d. U-Guards

e. Anchors

f. Attachments

8. Building entrances and termination methods

a. Aerial and underground entrances

b. Inside cables

c. Grounding and bonding practices

d. Termination panels and devices

e. Port connections and maintenance.

Day 4

9. Underground OSP Plant Maintenance - Lab: Field Trip

a. Manholes

b. Handholes

c. Transitions

d. Directional bores

e. Duct systems

10. Safety

Delivery Method

Instructor-Led with numerous labs and exercises.

Equipment Requirements

(This apply's to our hands-on courses only)

BTS always provides equipment to have a very successful Hands-On course. BTS also encourages all attendees to bring their own equipment to the course. This will provide attendees the opportunity to incorporate their own gear into the labs and gain valuable training using their specific equipment.

Course Length

4 Days