

Hands-On

# Coax Cable Splicing

Termination, Troubleshooting and Repair



## Course Description

This extensive Hands-On course covers the performance outcomes, skills and knowledge required to splice, terminate, install, test and troubleshoot coaxial cable on customer premises in communications applications, including digital and analogue, telephony, data and video.



## Students Will Learn

- To install and terminate coaxial cable types, including hard line (internal or external) and flexible (internal or external) to industry standards applying related OHS requirements and work practices
- To install different connector types
- How to conduct and interpret test results
- How to determine compliance with manufacturer's certification and warranties
- To provide report documenting the installation and test results to client
- To comply with all related OHS requirements and work practices.

## Target Audience

Technical staff who install and terminate customer premises coaxial cable for new installations, upgrades or maintain existing networks in domestic, commercial and industrial installations.

## Prerequisites

Basic communications understanding and skills.

## Course Outline

### 1. Prepare to Install and Terminate Coaxial Cable

- 1.1. Prepare for given work according to relevant legislation , codes , regulations and standards
- 1.2. Arrange access to the site according to required procedure
- 1.3. Inform appropriate personnel of identified hazards on worksite
- 1.4. Select coaxial cable type , connectors and manufacturer's tool to comply with installation environment and customer requirements
- 1.5. Check proposed route and bend radius to meet manufacturer's specifications and industry standards
- 1.6. Test cable on drum for radio frequency (RF) continuity

### 2. Install, Terminate and Test Coaxial Cable

- 2.1. Maintain cable segregation to industry standards
- 2.2. Protect the integrity of the coaxial shield cable to ensure no loss of signal during operation and maintain bend ratios to not exceed manufacturer's specifications and industry standard
- 2.3. Locate securing hardware at uneven distances to minimize the cumulative effect on cable wave shape properties
- 2.4. Install cable following occupational health and safety (OHS ) and environmental requirements and complying with manufacturer's specifications and industry standards
- 2.5. Terminate the cable and perform the type of termination specified in the plan using safe work practices and according to manufacturer's specifications
- 2.6. Test the termination for transmission loss and strength and re-terminate the coaxial cable if the transmission loss exceeds the manufacturer's specifications
- 2.7. Record all measurements
- 2.8. Fit over-voltage protection devices to all cables with metallic component where required

### 3. Remove Fiber Hazards from Work Area

- 3.1. Clean work area thoroughly to minimize risk of injury from loose glass fibre
- 3.2. Dispose of waste safely according to relevant environmental requirements
- 3.3. Restore worksite to the customer's satisfaction

#### **4. Document Installation**

- 4.1. Update plans and records with details of installation and test results
- 4.2. Notify client of work completion and obtain sign off

### **Delivery Method**

Instructor-Led with numerous Hands-On exercises throughout.

### **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**

3 Days