

**Course Name:** Antenna Connectors I & M

**Course Overview:**

This class is designed to teach the fundamentals of antenna connectors, installation and maintenance. The class is divided into two sections, with the morning being directed towards coaxial cables in the soft category and connections; the afternoon being focused on hard line coaxial cables. The class is 50% hands-on exercises with evaluation of student performance.

**Course Length:** 1 day

**Who should attend?**

- Installers
- Field Service Technicians
- Design/Transport Engineers
- RF Engineers
- Managers/Field Supervisors
- Field Engineers
- Technicians

**You will learn:**

- Fundamentals of cable and impedance matching
- Cable and connector types
- Required tools and equipment
- Efficient installation and maintenance of coaxial cable and systems
- Troubleshooting

**Prerequisites:** None

**Customizable Course:** Yes

**Course Content:**

Antennas & Transmission Lines

- Why use transmission lines
- How antenna cables fit into the network
- Resonance & Bandwidth
- Terminations

Coaxial cables

- Construction
- Loss
- Propagation characteristics



- Testing

#### Connectors

- Type – N Connectors
- BNC Connectors
- DIN Connectors
- SMA Connectors

#### Making connections - Soft cables

- Mechanics of coaxial connectors
- Preparing cables for connectors
- Installing connectors – Customer Specific

#### Hard Line Coaxial Connections

- Why use Hard lines
- When to use Hard Lines
- Cable Types & sizes
- Cable Loss

#### Installation Considerations

- Connector Types
- Installation practices
- Specialty cables – radiating cables

#### Installing Connectors

- Preparing cables
- Preparing connectors
- Installing connectors

#### Grounding Considerations

- When to ground
- Grounding principals
- Connecting grounds

#### Weatherization

- Installing “O” Rings
- Installing weather tapes
- Final Taping of connectors
- Drains

