

Course Name: Anritsu Site Master Certified Line Sweep

Course Overview: Anritsu Certified Site Master Training is an intense, hands-on, two-day training course that focuses on RF line-sweep theory, technology and practical applications. Students will learn the skills necessary to install, test, and maintain RF cable feedlines, and antenna systems. This course is conducted by technically skilled, Anritsu factory-certified instructors. This class will also give you unique insights to line sweeping projects.

Course Length: Two Day

Who should Attend:

- Wireless Carriers
- Base Station OEMs
- Tower Companies
- Field Engineers
- Installers
- Site Managers

You will Learn:

- Technical aspects of line sweeping
- How to set up a line sweep
- How cable length, cable type, and system components affect line sweep measurements
- How to use DTF to get accurate and meaningful distance to fault results
- How to identify, locate, document and resolve cable line transmission faults

Prerequisites: None

Customizable Course: No

Course Content:

Introduction to Line Sweeping

- What is a Line Sweep?
- Understanding Return Loss and VSWR
- Impedance and Impedance Matching
- Understanding Insertion Loss

System Components and Performance

- Transmission Lines
- Connectors
- Calculating Insertion Loss
- Quality of Installation

- Causes of Impedance Mismatch
- Transmission- Line Systems

Line Sweeping Fundamentals

- Understanding How to Perform Basic Measurements
- Distance to Fault
- Use of Precision Components (Open/Short/Load)
- Important Setup Considerations

Lab 1: Basic Setup and Measurements (Instructor-led)

- Site Master Functions and Operation
- Calibration
- Performing Return Loss/VSWR and Insertion Loss
- Distance to Fault Setup

Lab 2: Basic Setup and Measurements (Self-paced)

- Additional Practice of Basic Measurements
- Recognizing the Difference Between Passing and Failing Systems
- Using Distance to Fault to Locate Problems
- Review of the Different Types of Measurements
- Interpretation of Test Results

Trace Interpretation

- Review of the Different Types of Measurements
- Interpretation of Test Results

Handheld Software Tools

- Downloading Plots to PC
- Using HHST to Process and Save Data

Lab 3: Antenna Characterization

Lab 4: Additional Troubleshooting and System Verification

Hands-on Practical and Written Exams