

Course Name: DC Power Systems

Course Overview:

DC power is vital to communications systems to maintain uninterrupted communications. This course covers the fundamentals of DC power, power equipment, power storage, uninterruptible power supplies (UPS), battery maintenance, and safety.

Course Length: 1 day

Who should attend?

- Field Service Technicians
- Field Engineers
- Managers/ Field Supervisors
- Design Engineers
- Electricians
- Managers or Supervisors

You will learn:

- DC power fundamentals
- Proper maintenance of DC power equipment
- Batteries and uninterruptible power supplies (UPS) usage
- Power, voltage, and current testing
- Safety procedures

Prerequisites: None

Customizable Course: Yes

Course Content:

- Communications Site Equipment
- AC-DC converters and rectifiers
- Batteries
- Uninterruptible power supplies (UPS)
- Cooling and conditioning systems
- Remote monitoring and alarming systems
- AC systems
 - Generators
 - Transfer switches
 - Circuit breaker panels

Overview of DC and AC Electricity

- Current flow
- Voltage



- Resistance
- Ohm's Law
- Power storage
- Single-phase AC
- Three-phase AC
- Power generation
- Chassis ground
- Earth ground

Testing and Maintenance

- Load testing
- Remote monitoring
- Replacement
- Procedures for backup power conditions
- Power planning
- Power, voltage, and current readings

Safety

- VOM meter
- Battery precautions
- Gloves
- Goggles
- Apron

