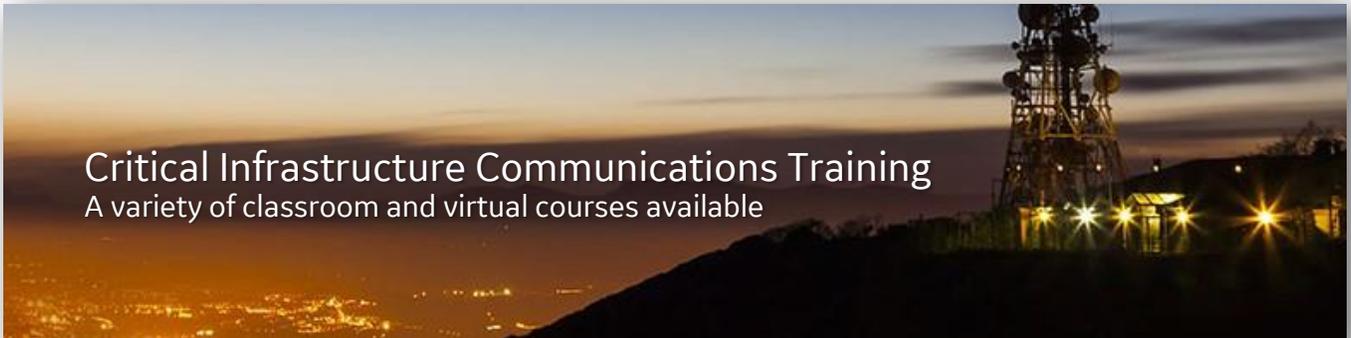


GE MDS Communications Product Training & Certification 2023



GE MDS Training / Technical Support

+1-585-242-9600

training.mds@ge.com

175 Science Parkway
Rochester, NY 14620

Industrial Communications Courses

GE's Industrial Communications training for the Orbit Platform is offered in two levels, a 2-day basic product training or a 5-day certification Training. Training can be held virtually online, at our factory or on-site in your facility.

Factory Training

GE MDS provides this training at our Rochester NY. Training center. GE's training provides customers with high-quality knowledge to be safe, efficient and successful in industrial wireless communications.

Customer Site Training

To increase the number of employees who can benefit from training, GE MDS Technical Training offers the option of conducting training courses in person at customer facilities. These on-site courses can be customized to a specific product or a range of products.

All dates shown are for training at the GE MDS Training facility located in Rochester NY.

Virtual Online Training

We offer virtual online training sessions as an option that can be customized to meet your team's needs.

[Link to GE MDS Training website](#)

[Link to GE MDS Training in the Online Store](#)



Orbit Platform MCR/ECR/OCR and MPRx Product Training

- **Managed Connected Router (MCR – large form factor)**
- **Edge Connected Router (ECR – small form factor)**
- **Master Station (MPRL – Licensed Narrowband, MPRU – Unlicensed 900 MHz)**
- **Outdoor Connected Router (OCR – Outdoor Enclosure – Cellular/Unlicensed 900 MHz)**



MDS Orbit Platform Basic (2 Days)

Day 1 - Networking Basics, Wireless Basics, Introduction to MDS Orbit Platform

Day 2 – Orbit interfaces, Orbit Bridging, Cellular SIM Options, Firewall Basics, Basic Routing

MDS Orbit Platform Advanced Certification (5 Days)

Day 3 - Terminal Server/Serial Service, VLANs, Creating VLANs, Configuring Interfaces, Configuring Firewall, Port Forwarding, Quality of Service (QoS), Prioritization, Fairness, Traffic Shaping, Dynamic Routing

Day 4 - Security: Firewall, Tamper Detection Configuration, Radius User Authentication, One Time Passwords (OTP) and Admin/Tech/Operator Password, over the air encryption, Securing Cellular: IPSec (Internet Protocol Security) VPN Tunnel

Day 5 - Point to Multipoint Serial Over Cell, Interface Failover/Failback, Summary of Topics Covered throughout the Week, Written Exam (80% Pass required for Certification).

GE MDS SD Master and Remote Training



Basic MDS SD and SD Master Station (2 Days)

Day 1 – Installation and Maintenance, Configuration, Feature / Application Outline

Day 2 – Network Topologies (How and why to choose), Pinouts and Types of Serial polling capability, Setup basic Pt to Point network, Basic serial polling (B and A Modems), IP Payload and polling (Transparent Mode), IP Payload polling in Packet w/ MAC mode Ethernet Bridging.

MDS SD and SD Master Station advanced topics available:

Advanced Bridge Filter & LAN Filter), Terminal Server in SDx and SDMS (via Console and Web), Hands on lab covering Bridged IP data w/ terminal server Vs. IP payload data.

Store and Forward, System ID, Peer to Peer, Encryption all modes, Security, Virtual Radio Channels (VRC), VLANs.

Fundamentals of Radio Frequency Communications (RF Fundamentals)

Maximize the performance of your communications network by increasing your knowledge of RF and basic Data test equipment utilized in the wireless communications industry. This two-day Fundamentals course is an ideal refresher course and an excellent introductory course

Day 1 - Radio Frequency (RF) Fundamentals

- Overview
- Units of Measurement and RF Terminology
- Wave and Signal Mechanics
- Antenna Basics
- RF Interconnections
- Link Mechanics
- Applications and Characteristics
- Evaluation Radio Paths
- Multipath
- Feed lines
- System Design
- Understanding and Mitigating Interference

Day 2 - Radio Interfacing

- Serial interfacing overview
- Serial interfacing basics
- Data Terminal Equipment (DTE)
- Data Communications Equipment (DCE)
- Electrical Standards
- Short-haul Modems
- Fiber Interfaces and Fiber Modems
- Multi-drop Interfacing
- Interface Conversions
- Special Purpose Interface Devices
- RF Test Equipment
- Data Test Equipment
- Grounding and Installation
- Troubleshooting

Additional Products

Training on TransNET radios is available by special request



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GE MDS 2023 Training Schedule: *

February 6- 7	Orbit Basic
February 6-10	Orbit Advanced
February 14-15	RF Fundamentals
April 17-18	Orbit Basic
April 17-21	Orbit Advanced
April 25-26	RF Fundamentals
June 5- 6	Orbit Basic
June 5- 9	Orbit Advanced
June 13-14	RF Fundamentals
August 7- 8	Orbit Basic
August 7-11	Orbit Advanced
August 15-16	RF Fundamentals
October 23-24	Orbit Basic
October 23-27	Orbit Advanced
November 14-15	RF Fundamentals

*These dates are tentative based on minimum number of attendees registered three weeks prior to the training session start date.