



2018 PRODUCT AND SYSTEM TECHNICAL TRAINING COURSE CATALOG

MOTOROLA SOLUTIONS EDUCATION SERVICES
LATIN AMERICA



MOTOROLA SOLUTIONS



WELCOME

Choosing Motorola Solutions is only the beginning.

Next: Get trained on Motorola Solutions’ latest innovations and improve your proficiency with our expanding training portfolio!

With versatile training solutions and best practices from our expert instructors and designers, you can increase the return on your technology investment throughout the product and system lifecycle.

Motorola Solutions Education Services provides your organization with one-stop shopping and end-to-end training support: from needs analysis and consultancy to course development, customization, delivery, and logistics.

Let us work with your team to ensure that your organization configures, operates and maintains your products and systems to effectively and efficiently meet your specific needs.

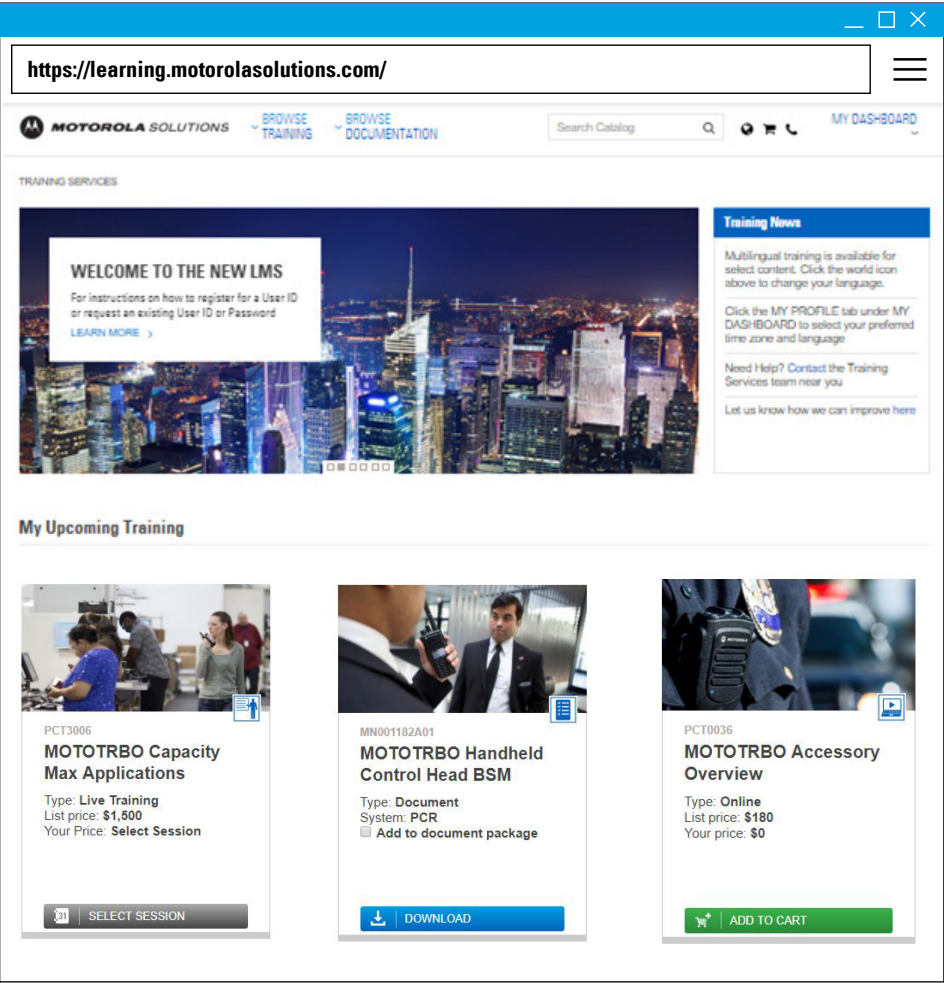


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GENERAL INFORMATION

A NEW INTERACTIVE LEARNING MANAGEMENT SYSTEM... DESIGNED FOR YOU!



USE THE SEARCH BOX OR FILTERS FEATURE TO QUICKLY AND EASILY SEARCH FOR TRAINING OR DOCUMENTATION

VIEW YOUR HISTORY AND UPCOMING TRAINING ON YOUR PERSONALIZED DASHBOARD

RECEIVE REMINDER NOTIFICATIONS OF UPCOMING TRAINING OR CHANGES TO YOUR TRAINING

EASILY LOCATE AND DOWNLOAD DOCUMENTS

KEEP UP-TO-DATE WITH TRAINING NEWS AND ANNOUNCEMENTS

GENERAL INFORMATION

For information on prerequisites and to register for courses visit the LMS at: [LEARNING.MOTOROLASOLUTIONS.COM](https://learning.motorolasolutions.com)

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

HOW TO REGISTER

THE LEARNING MANAGEMENT SYSTEM (LMS)

The LMS is your valuable resource to see the latest courses, descriptions, requirements, dates and locations. If you are a Motorola Solutions Customer who already has a Motorola Solutions Login ID, you can go to the **Enroll in a Course** section for further instructions.



SET UP A NEW USER ACCOUNT AND PASSWORD

CREATE A MOTOROLA SOLUTIONS LOGIN ID:

- Visit: <https://learning.motorolasolutions.com>
- Click **LOG IN**
- At the bottom of the dialog screen **Click Register**
- Complete the required information on the form
- Click **Submit**
- A confirmation email will be sent following your submission
- Additional instructions for activating your account will be provided by email in 1-3 business days

LOOK FOR THIS ICON
THROUGHOUT THE
CATALOG FOR EASY
ACCESS TO THE LMS





TO ENROLL IN A COURSE
(ONCE YOU HAVE AN LMS ACCOUNT)

ENROLL IN A COURSE:

- Visit: <https://learning.motorolasolutions.com>
- Click on **LOG IN**
- Enter your Log In ID and Password and Click **LOG IN**
- If you have forgotten your User ID or Password, click **Forgot User ID** or **Forgot Password**
- Find a training course by clicking **Browse Training** at the top of the screen or use the **Search Catalog** feature

QUESTIONS ABOUT
YOUR ACCOUNT OR
A COURSE?

Your help desk information can be located in the top, right hand corner of the catalog pages. You can also [click here](#) to view the help desk contact information in your region.

GENERAL INFORMATION

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TRAINING OPTIONS, POLICIES AND REQUIREMENTS

TRAINING OPTIONS

INSTRUCTOR-LED TRAINING


Resident training consists of regularly scheduled classes conducted at one of the Motorola Solutions Technical Training Centers. The centers are set up so students can immerse themselves in the subject matter, with limited distractions. They receive substantial time for hands on training that enables them to develop creative solutions for unique problems. Resident training includes a diverse customer base; therefore, the classroom equipment is modeled upon a standard configuration. In addition, some courses include media-based activities that are facilitated by the instructor. Advance registration is required.

ON-SITE TRAINING AT YOUR LOCATION


All course titles can be delivered at your location, taught by our knowledgeable instructor staff. For more information on our on-site delivery options, contact your Account Manager.


ONLINE SELF-PACED AND VIRTUAL CLASSROOM


Online Self-Paced learning allows you to gain foundational knowledge on a variety of topics using your own computer, at your own schedule. Virtual Classroom Learning offers scheduled instructor-led courses in an on-line virtual environment. Select courses from the recommendations listed in the Training Roadmaps from each product area of the catalog, or simply based upon your own personal need. Just look for courses with the Online Self-paced or Virtual Classroom icon.





UNDERSTANDING THE ICONS



INSTRUCTOR-LED


ONLINE, SELF-PACED


OPTIONAL COURSE


VIRTUAL CLASSROOM


TEST



POLICIES AND REQUIREMENTS

CANCELLATION AND RESCHEDULING
BY THE STUDENT

Customer cancellation or rescheduling made less than 30 days prior to the class start date will be subject to the full course tuition.

CANCELLATION AND RESCHEDULING
BY MOTOROLA SOLUTIONS

Motorola Solutions reserves the right to change or cancel classes up to 10 business days prior to the class start date. You will be notified at that time of such change or cancellation.

PROFESSIONALISM

Students are expected to maintain professional conduct and dress at all times. Class dress is casual, but smart. For safety and security reasons, we cannot permit shorts, thong type sandals, or tank tops in the classroom.

LAPTOP REQUIREMENTS

Some of our classes may require students to bring their laptops to the classroom so that they may utilize an electronic copy of the class material. Please review your enrollment confirmation email for specific requirements for your class.

TRAINING CONTENT AND STRATEGY
DISCLAIMER

All of Motorola Solutions training classes are designed to support and align with the Motorola Solutions Service strategy for each product. This strategy may include a combination of (but not limited to) processes, procedures, recommendations, and instructor experiential advice which may involve repair, replacement, and or recovery of hardware, software, or firmware of Motorola Solutions products. The repair, replacement, or recovery of these products may vary from product to product. Motorola Solutions reserves the right to change the structure and content of all courses at any time.

GENERAL INFORMATION

For information on prerequisites and to register for courses visit the LMS at: [LEARNING.MOTOROLASOLUTIONS.COM](http://learning.motorolasolutions.com)

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

HELPFUL INFORMATION

FOR QUESTIONS AND ASSISTANCE

The **LMS Helpdesk** is available for you Monday - Friday from 8:00am - 6:00pm (U.S. EST) on the phone numbers listed on the table below. Attention is available in Spanish, Portuguese and English. You may also email our LMS Helpdesk at: training.lacr@motorolasolutions.com.

Call the phone number of your convenience in the **Learning Helpdesk** phone numbers list below:

COUNTRY	LOCAL PHONE NUMBER
Argentina	0800-333-3708
Brazil	0800-892-4264
Chile	123-0020-2126
Colombia	01-800-710-2285
Costa Rica	0800-013-1450
Mexico	001-855-241-8253
Panama	001-800-205-3867
Peru	0800-55760
Venezuela	0800-100-9332

For assistance you can also dial one of the following direct phone lines according to your language of preference:

LEARNING HELPDESK PHONE NUMBERS	
Spanish	DID 3127255372
Portuguese	DID 3127255373
Caribbean	DID 3127255368

For assistance specific for partner accounts please contact us at: partners.lacr@motorolasolutions.com.

HOW TO MAKE PAYMENTS WHEN ENROLLING IN A COURSE

HOW TO MAKE PAYMENTS WHEN REGISTERING

For your convenience we accept the following method of payment:

- Credit Card
- Bank Transfer

Prepayment is required to secure your registration and it must be received by Motorola 30 days prior to your attendance.

Contact the Help Desk for assistance with payment and Bank Transfer specifications. All pricing listed is US dollars.



DOWNLOAD THE LATIN AMERICA TRAINING SCHEDULE



TRAINING SCHEDULE


Click on the above download link to access the schedule file or visit:

[Latin America Training Schedule](#)

To view the most current details for any of our courses, please register for an account (see Page 4) and log into the Motorola Solutions Learning Management System (LMS) at: learning.motorolasolutions.com or call the helpdesk for assistance. Attention is available in Spanish, Portuguese and English. You may also email our LMS Helpdesk at: training.lacr@motorolasolutions.com.

COURSES

USING THE TRAINING ROADMAPS

The test icon  found in the roadmaps indicates that a post test will be administered after the online overview course is completed. The test is intended to determine that participants have the requisite knowledge necessary to continue on with the remainder of the curriculum.



FOUNDATIONAL COURSES

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**THE LEARNING
MANAGEMENT
SYSTEM (LMS)**

To register for a course, go to learning.motorolasolutions.com

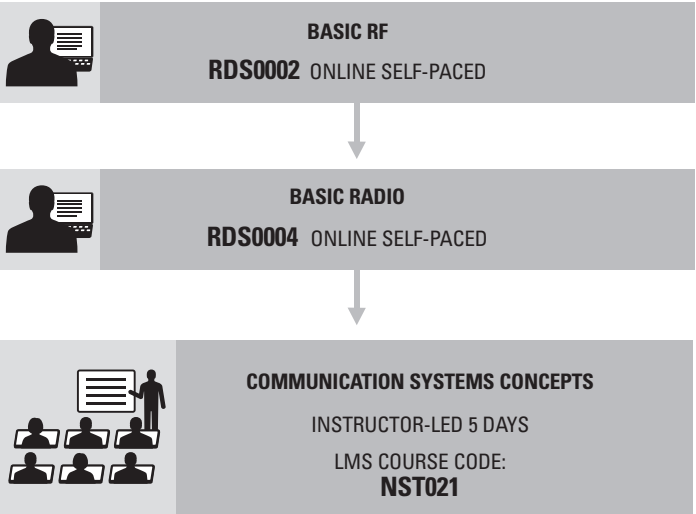
RADIO SOLUTIONS FOUNDATIONAL

For information on prerequisites and to register for courses visit the LMS at: [LEARNING.MOTOROLASOLUTIONS.COM](https://learning.motorolasolutions.com)

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

RF FUNDAMENTALS

RF BASICS / RADIO SYSTEM BASICS

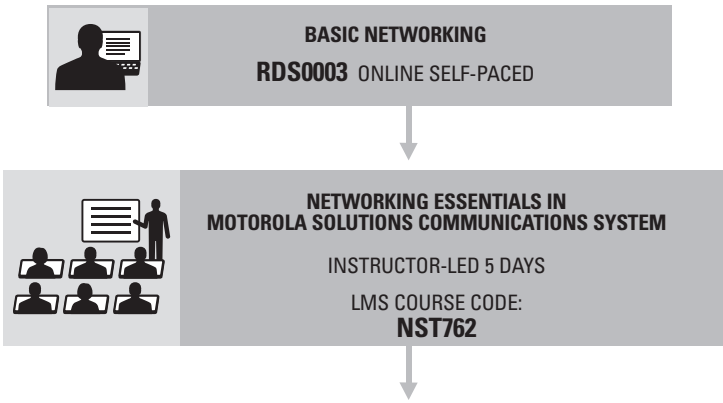


RADIO SOLUTIONS FOUNDATIONAL

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For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com


IP/NETWORKING FUNDAMENTALS



CHOOSE ONE OF THE FOLLOWING COURSES BELOW ACCORDING TO YOUR SOLUTION SYSTEM

DIMETRA SYSTEM


DIMETRA SYSTEM APPLIED NETWORKING

 INSTRUCTOR-LED 5 DAYS
LMS COURSE CODE:
DMT1108

OR

ASTRO® 25 SYSTEM


ASTRO® 25 SYSTEMS APPLIED NETWORKING

 INSTRUCTOR-LED 5 DAYS
LMS COURSE CODE:
NWT003

OR

MOTOTRBO™ SYSTEM


MOTOTRBO™ SYSTEMS APPLIED NETWORKING

 INSTRUCTOR-LED 4 DAYS
LMS COURSE CODE:
PCT2007

OR

LTE SYSTEM

PUBLIC SAFETY LTE APPLIED NETWORKING

 INSTRUCTOR-LED 5 DAYS
LMS COURSE CODE:
LTE2007

CURRICULUM COMPLETE
PARTICIPANT HAS IP PROTOCOLS AND NETWORKING SKILLS TO USE MOTOROLA SOLUTIONS SYSTEMS REQUIRING ADVANCED TECHNICAL TRAINING.

[CLICK HERE TO GO TO PAGE 35 FOR MORE DETAILS ON DIMETRA](#)

[CLICK HERE TO GO TO PAGE 18 FOR MORE DETAILS ON ASTRO® 25](#)

[CLICK HERE TO GO TO PAGE 73 FOR MORE DETAILS ON MOTOTRBO™](#)

[CLICK HERE TO GO TO PAGE 83 FOR MORE DETAILS ON LTE](#)

RADIO SOLUTIONS FOUNDATIONAL

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For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

BASIC RF

COURSE OVERVIEW

This course emphasizes the concepts behind RF Systems theory and operation. Topics include basic radio transmitters and receivers, RF propagation, modulation, antenna systems, transmission lines and data-communications.

AUDIENCE

Technical staff who need to understand Communication Systems Concepts including basic radio, RF propagation, modulation, antenna systems, transmission lines and data-communications.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe electrical principles, including direct and alternating current.
 - Describe the basic structure of radio transmitters and receivers.
 - Describe the operation of the antenna system.
 - Identify different types of transmission media.
 - Describe RF propagation and understand system gains in a link budget.

REQUISITE KNOWLEDGE

None



ONLINE, SELF-PACED
LENGTH: 2 HOURS
LMS COURSE CODE:
RDS0002

BASIC RADIO

COURSE OVERVIEW

The purpose of this course is to provide the student with the basic, foundational land mobile two-way radio knowledge required when working with Motorola Solutions. This course is ideal for all people who sell or service land mobile two-way radios and it was especially designed to meet the needs of the MR Channel and Motorola Solutions employees.

AUDIENCE

Technical staff who need to understand basic two-way radios

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Define what a two-way radio is.
 - Describe two-way radio components.
 - Describe communication types.
 - List and describe ways of expanding coverage.
 - Describe analog and digital solutions.
 - Describe how transmit and receive processes work in conventional and trunked two-way radio.
 - Define system scalability.
 - Identify the considerations to implementing a two-way radio.
 - List the characteristics of single-site, single-zone and multi-zone systems.
 - Explain the concept of two-way radio security.
 - Describe the open standards for the following technologies: APCO P25, TETRA and DMR.

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- Basic RF (RDS0002)



ONLINE, SELF-PACED
LENGTH: 4 HOURS
LMS COURSE CODE:
RDS0004

BASIC NETWORKING

COURSE OVERVIEW

This course provides a detailed description of the fundamentals of system networking. Topics include the OSI seven layer model, bridges and switches, IP and routing, applications and security.

AUDIENCE

Engineers who need to understand the essentials of system networking.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Identify the Elements and Interconnectivity of a basic network
 - Define the OSI and TCP/IP Models
 - Define the advantages of different Network Layout Options
 - List the Physical and Data-Link Layers of the OSI and TCP/IP Models
 - Define the Network and Transport Layers of the OSI and TCP/IP Models
 - Identify the Service Layers within the OSI and TCP/IP Model
 - Define the concept of Network Security.
 - Identify standards organizations

REQUISITE KNOWLEDGE

None



ONLINE, SELF-PACED
LENGTH: 1 HOUR
LMS COURSE CODE:
RDS0003



[CLICK HERE TO VIEW THE SCHEDULE](#)

RADIO SOLUTIONS FOUNDATIONAL

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For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

RF FOR RADIO PROFESSIONALS

COURSE OVERVIEW

This course emphasizes the concepts behind RF Systems theory and operation. Topics include basic radio transmitters and receivers, RF propagation, modulation, antenna systems, transmission lines and data-communications.

AUDIENCE

Technical staff, who need to understand Communication Systems Concepts including basic radio, RF propagation, modulation, antenna systems, transmission lines and data-communications.

COURSE OBJECTIVES

- Course consists of six modules: Advanced RF: Introduction, Transmission Lines, RF Hardware Filters, RF Performance, Test Equipment, and Troubleshooting. By the end of the course, you will be able to:
- Describe basic circuit-related phenomena and elements
 - Describe the filtering process and types of RF filters List,
 - Describe and compare digital modulation schemes
 - List common frequency spectrum bands and describe their common uses
 - Describe the transmission line theory
 - Provide the rules for cable selection, routing and installation
 - List advanced RF hardware filters, and provide their descriptions
 - Discuss RF performance issues
 - List and describe transmitter performance parameters
 - List and describe receiver performance parameters
 - List and describe common test equipment
 - Describe the RF troubleshooting process

REQUISITE KNOWLEDGE

RF and radio basic knowledge or completion of RDS0002 and RDS0004 is highly recommended

INTRODUCTION TO R56

COURSE OVERVIEW

The purpose of this course is to present a high level overview of the RF site design and construction process, in line with the guidelines listed in Motorola Solutions' Standards and Guidelines for Communication Sites (R56) manual.

AUDIENCE

Technical Associates who need to use the R56 processes. Anyone who needs a technical introduction to the R56 processes.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe the site design and development tasks needed to meet R56 requirements.
 - Describe the building and shelter design and installation tasks needed to meet R56 requirements.
 - Identify the proper external and internal grounding tasks needed to meet R56 requirements.
 - Identify transient voltage surge suppression needs that meet R56 requirements.
 - Minimize the impact of RF Site Interference, in line with R56 requirements.
 - Identify the equipment installation tasks needed to meet R56 requirements.

REQUISITE KNOWLEDGE

None



ONLINE, SELF-PACED
LENGTH: 1 HOUR
LMS COURSE CODE: NST9252

SITE INSTALLATION PRACTICES WORKSHOP (R56)

COURSE OVERVIEW

The Site Installation Practices Workshop (R56) course is designed to present the standards and guidelines for installing a Motorola Solutions communication system. Participants will understand how a properly installed system can help to ensure a safe and efficient communications system, reducing system down time.

AUDIENCE


Technical System Managers and Technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- List the purposes of grounding and evaluate their importance in terms of personal safety and effective system installation and protection
 - Apply principles of basic electronics to the installation standards found in the R56 manual
 - Determine how an effectively installed ground system provides protection for a communication system from a lightning strike or electrical anomalies
 - List the minimum requirements and specifications for the external and internal ground system
 - List the minimum requirements and specifications for installation equipment, cables and documentation for a reliable communication system installation
 - Investigate sources for possible solutions to various installation scenarios

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- Graduate of a basic electronics course or equivalent experience.



INSTRUCTOR-LED
LENGTH: 4 DAYS
LMS COURSE CODE: NST925

RADIO SOLUTIONS FOUNDATIONAL

For information on prerequisites and to register for courses visit the LMS at: [LEARNING.MOTOROLASOLUTIONS.COM](https://learning.motorolasolutions.com)

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

R56 STANDARDS UPDATE

COURSE OVERVIEW

The R56 Standards and Guidelines for Communication Sites is in the process of being updates for 2017. This course will cover all updates and is intended for individuals who have recently completed, or recertified their R56 certification. It will provide insight and understanding on the changes and their impact on the documented standard.

AUDIENCE


Electronics Equipment Technicians who are responsible for the installation or inspection of communications equipment. Communication Site Installers (R56) and Communication Site Installation inspectors (CSII)

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Be familiar with a current glossary of terms
 - Understand changes and their relationship to the manual and certification
 - Be aware of high level R56 Standards manual updates by chapter

REQUISITE KNOWLEDGE

Individuals must hold a valid R56 or CSII certification or have completed all necessary coursework prior to attending this course.



INSTRUCTOR-LED
LENGTH: 1 DAY
LMS COURSE CODE: NST9256

COMMUNICATION SYSTEMS CONCEPTS

COURSE OVERVIEW

The Communication Systems Concepts course emphasizes the concepts behind RF Systems theory and operation. Major topics covered include:

- RF System Operation, including talkaround, repeater operation, and types of signaling used in RF Systems

- A basic walkthrough of building a communication system from 'Simplex', to 'Half Duplex', 'Voting Systems', and 'Simulcast' is done, emphasizing the improvements in communication obtained with each step
- Trunking Operation, including Smartzone operation
- Types of modulation used in RF System operation, including ASTRO. Radio frequency path including the antenna and transmission line
- Decibels and their uses on the job. RF Propagation/ RF Interference
- Basic Troubleshooting practices from the system perspective

AUDIENCE


General

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Define terms commonly used in two-way communication systems
 - Effectively use two-way radio communication systems knowledge to troubleshoot typical two-way communication radio systems
 - Develop requirements for a two-way radio system by establishing programming and protocol requirements as requested
 - Improve skills in the interpretation of typical two-way radio checks of the receiver, transmitter and the antenna system to troubleshoot a two-way radio communication system
 - Use decibels to interpret the radio frequency path and antenna system to describe expected radio communication system performance and troubleshooting

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- Knowledge of basic electronics
 - Experience using standard communication test equipment



INSTRUCTOR-LED
LENGTH: 5 DAYS
LMS COURSE CODE: NST021

RADIO SOLUTIONS FOUNDATIONAL

For information on prerequisites and to register for courses visit the LMS at: LEARNING.MOTOROLASOLUTIONS.COM

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

NETWORKING ESSENTIALS IN MOTOROLA SOLUTIONS COMMUNICATIONS EQUIPMENT

COURSE OVERVIEW

The Networking Essentials in Motorola Solutions Communications Equipment course provides the technician with the essential elements of networking required for the installation and maintenance of most Motorola Solutions communications systems. The course includes ample hands-on and basic troubleshooting on network elements.

AUDIENCE


System Technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Recall basic network terminology
 - Compare basic configuration types, both logical and physical
 - Describe the basic OSI (Open System Interconnect) model compared with the TCP/IP model
 - Construct a basic LAN with a Windows Server Domain Controller and workstations
 - Examine the interaction between the routers through their configurations
 - Use common network commands to simulate traffic and validate connectivity and routing

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- An understanding of the basic Motorola Solutions Communications Systems is highly recommended
 - Basic familiarization with computer operating systems is required
 - A basic knowledge of networking is helpful and recommended



INSTRUCTOR-LED
LENGTH: 5 DAYS
LMS COURSE CODE:
NST762

BRIDGING THE KNOWLEDGE GAP FOR ASTRO® 25 – TECHNICIAN

COURSE OVERVIEW

This seven-module course is designed to bring Technicians from different technical backgrounds and experience levels to a common starting point for the ASTRO® 25 curriculum. This course provides seven modules from the basic concepts of radio communication systems and computer networking features, through the evolution that led to the ASTRO® 25 trunking system’s architecture.

AUDIENCE

This course is intended for System Technicians, and other ASTRO® 25 system users who are new to trunked radio systems. Also those with experience in non-IP-based radio systems like SmartNet and SmartZone.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Explain the different radio system concepts as applied to conventional and trunked systems
 - Compare analog radio communication signaling to ASTRO® 25 radio communications signaling
 - Identify different communication concepts using representative block diagrams of the respective systems
 - Compare radio system communication concepts using representative block diagrams of the respective systems
 - Compare how voice and data, information flow through different radio communication system types and how the signaling information controls that flow of information
 - Describe the features of each radio communication system in terms of advantages and disadvantages

REQUISITE KNOWLEDGE

None



ONLINE, SELF-PACED
LENGTH: 4 HOURS
LMS COURSE CODE:
ACT100E

BRIDGING THE KNOWLEDGE GAP FOR ASTRO® 25 – SYSTEM ADMINISTRATOR

COURSE OVERVIEW

This five-module course is designed to bring Administrators from different technical backgrounds and experience levels to a common starting point for the ASTRO® 25 curriculum. This course provides seven modules from the basic concepts of radio communication systems and computer networking features, through the evolution that led to the ASTRO® 25 trunking system’s architecture.

AUDIENCE

System Administrators who are new to trunked radio systems. Also those with experience in non-IP-based radio systems like SmartNet and SmartZone.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Identify different communication concepts using representative block diagrams of the respective systems
 - Compare radio system communication concepts using representative block diagrams of the respective systems.
 - Compare how voice and data information flows through different radio communication system types, and how the signaling information controls that flow of information
 - Describe the features of each radio communication system in terms of advantages and disadvantages
 - Explain the Trunked Radio System Concepts

REQUISITE KNOWLEDGE

None



ONLINE, SELF-PACED
LENGTH: 4 HOURS
LMS COURSE CODE:
ACT101E

RADIO SOLUTIONS FOUNDATIONAL

For information on prerequisites and to register for courses visit the LMS at: LEARNING.MOTOROLASOLUTIONS.COM

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

TETRA OVERVIEW

COURSE OVERVIEW

This course will provide an introduction to TETRA as a precursor to proprietary TETRA and Dimetra solutions.

AUDIENCE


Personnel requiring a generic introduction to TETRA.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe the history and function of the TETRA Standard and ETSI Role in the European Standard
 - Describe the purpose and function of the various TETRA interfaces
 - Describe the Benefits of the TETRA services provided
 - List the benefits provided by the TETRA system
 - Describe the TETRA specifications for, system parameters, protocol specifications and the TETRA spectrum
 - Describe the various security safeguards in place within the TETRA standard for Radio communication systems
 - Describe the functions and purpose of TETRA

REQUISITE KNOWLEDGE

None



INSTRUCTOR-LED
LENGTH: 3 DAYS
LMS COURSE CODE:
TGTC06

ASTRO® 25 SYSTEMS APPLIED NETWORKING

COURSE OVERVIEW

The ASTRO® 25 Systems Applied Networking course provides technicians with the necessary networking information required for understanding the network components installed in modern Motorola Solutions communications systems. The course includes familiarization with basic networking concepts, and the networking components deployed in the ASTRO SmartZone System and ASTRO® 25 System..

AUDIENCE


Technical System Managers and Technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Recall basic network concepts
 - Identify the various system network components
 - Define the LAN topologies for each system
 - Define the WAN topologies for each system
 - Diagram SNMP deployment throughout the system
 - Identify the HP switches and Motorola Solutions series routers
 - Perform backup, restore, and recovery procedures of routers and LAN switches
 - Identify network security components and concepts in an ASTRO® 25 system

REQUISITE KNOWLEDGE

Networking Essentials in Motorola Solutions Communications Equipment (NST762)



INSTRUCTOR-LED
LENGTH: 5 DAYS
LMS COURSE CODE:
NWT003

SYSTEM ENGINEERING OVERVIEW

COURSE OVERVIEW

This course delivers a basic understanding of System Engineering.

AUDIENCE


Technical staff that requires to acquire a System Engineering Overview.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe electrical principles including AC and DC.
 - Describe radio principles.
 - Describe Impedance in transmission lines.
 - Describe the purposes and operation of an antenna system.
 - Describe RF propagation.
 - Describe Tetra Air Interface principles.
 - Describe RF Site Techniques and Planning.
 - Describe DIMETRA Call Processing and Networking.
 - Describe DIMETRA Fleetmapping concept.
 - Describe system optimization, the role of NM applications and RF tools used in the optimization process.

REQUISITE KNOWLEDGE

Knowledge of basic electronic & electrical, radio frequency and computer networking is an advantage.



INSTRUCTOR-LED
LENGTH: 3 DAYS
LMS COURSE CODE:
DMT1086

RADIO SOLUTIONS FOUNDATIONAL

For information on prerequisites and to register for courses visit the LMS at: [LEARNING.MOTOROLASOLUTIONS.COM](https://learning.motorolasolutions.com)

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

DIMETRA IP FLEETMAPPING WORKSHOP

COURSE OVERVIEW

This course provides an overview of the processes needed to design and develop a fleetmap for a DIMETRA R8.2 system. It is highly practical in nature and will guide delegates through the steps and processes necessary to design a basic Fleetmap. This course will not cover every programmable infrastructure or TETRA radio feature, but will provide the knowledge required for delegates to expand on the subjects covered in this course to develop more complex system Fleetmaps.

AUDIENCE

All staff who are involved in system planning and Fleetmapping of a DIMETRA IP R8.2 system.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Perform the basic planning requirements and complete a simple Fleetmap information template
 - Write a simple Fleetmap based on sample operational requirement information

REQUISITE KNOWLEDGE

- DIMETRA IP System Overview
- DIMETRA IP System Configuration & Administration Workshop

DIMETRA APPLIED NETWORKING

COURSE OVERVIEW

This course provides engineers and technicians with the necessary networking information required for the network components applied in the DIMETRA systems. The course includes overview of the basic networking concepts, network configuration overview of the transport network components and information assurance applied in the DIMETRA systems.

AUDIENCE

Internal employees

COURSE OBJECTIVES

- Define basic IP network hardware and protocols
- Analyze basic IP network connectivity and addressing
- Define DIMETRA Master Site VLAN/VRRP Operation
- Define DIMETRA Network Transport Subsystem
- Review DIMETRA Network Management applications
- Define DIMETRA Information Assurance
- Define DIMETRA Data Subsystem

REQUISITE KNOWLEDGE

none

MOTOTRBO™ SYSTEMS APPLIED NETWORKING

COURSE OVERVIEW

The MOTOTRBO™ Systems Applied Networking provides technicians with the necessary information required for understanding the typical networking requirements for implementing a variety or MOTOTRBO™ solutions. The course includes familiarization/review of basic networking concepts and MOTOTRBO™-specific networking requirements. This course will focus on specific configurations for IP Site Connect, Linked Capacity Plus, and Connect Plus trunking systems.

AUDIENCE

Technical System Managers and Technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Recall Basic Networking Concepts
 - Identify recommended network components for MOTOTRBO™ systems
 - Define LAN/WAN topologies for MOTOTRBO™ systems
 - Perform backup, restore and recovery of recommended network components
 - Identify network security concepts for MOTOTRBO™ systems

REQUISITE KNOWLEDGE

Networking Essentials in Motorola Solutions Communications Equipment (NST762)

RADIO SOLUTIONS FOUNDATIONAL

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PUBLIC SAFETY LTE APPLIED NETWORKING

COURSE OVERVIEW

The Public Safety LTE Applied Networking course covers the operation and maintenance of Motorola Solutions-supplied network transport equipment used in a PS LTE network. Participants will learn the operation and replacement tasks required to maintain Layer 2 switches, Layer 3 switches, the NTP server, firewalls, and other devices which provide backhaul transport and connectivity services in the network. This lab-based course offers students practice with critical maintenance procedures on standalone equipment without impacting network operation.

AUDIENCE


Customer System Managers, Customer Network Transport Technical Staff, MSI employees

COURSE OBJECTIVES


- After completing this course, the student will be able to:
- Check and manage status of LTE network transport devices
 - Upgrade and downgrade device firmware or operating system
 - Backup and restore device configuration
 - Replace device hardware
 - Validate and troubleshoot device operation

REQUISITE KNOWLEDGE


none




INSTRUCTOR-LED
LENGTH: 5 DAYS
LMS COURSE CODE:
TGTC04



INSTRUCTOR-LED
LENGTH: 5 DAYS
LMS COURSE CODE:
DMT1108



INSTRUCTOR-LED
LENGTH: 4 DAYS
LMS COURSE CODE:
PCT2007



INSTRUCTOR-LED
LENGTH: 5 DAYS
LMS COURSE CODE:
LTE2007



ASTRO® 25 IV&D SYSTEM COURSES



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THE LEARNING
MANAGEMENT
SYSTEM (LMS)

To register for a course, go to
learning.motorolasolutions.com

ASTRO® 25 IV&D SYSTEM COURSES (CONTINUED)

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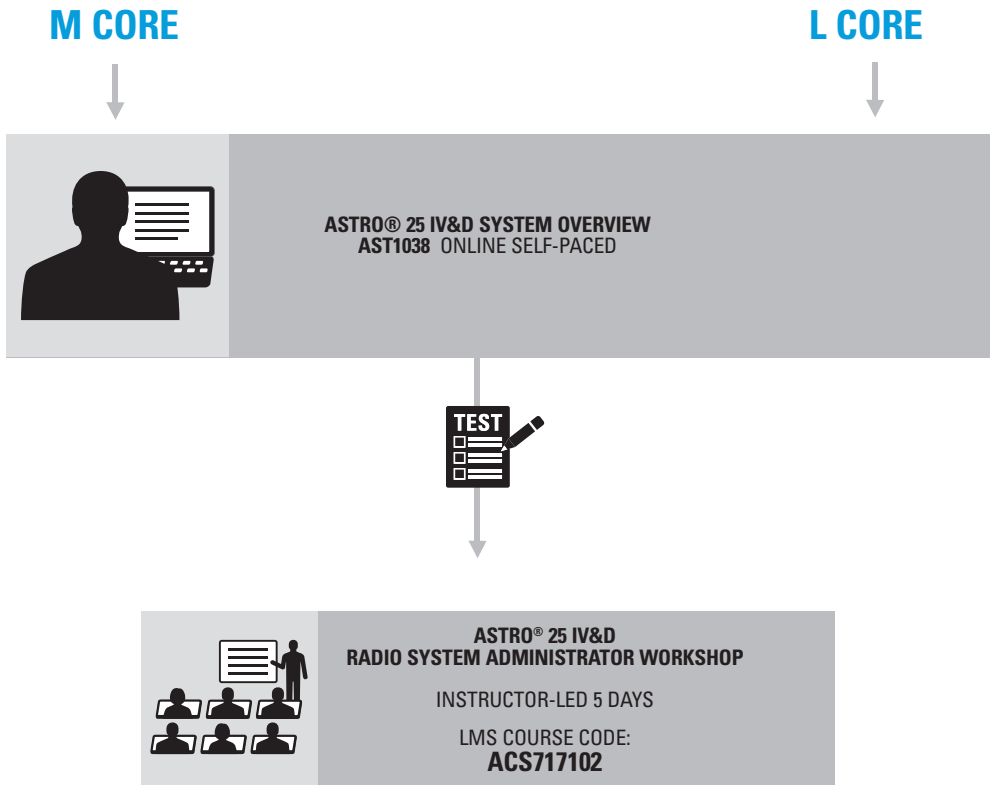


RADIO SOLUTIONS ASTRO® 25 IV&D SYSTEMS

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For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

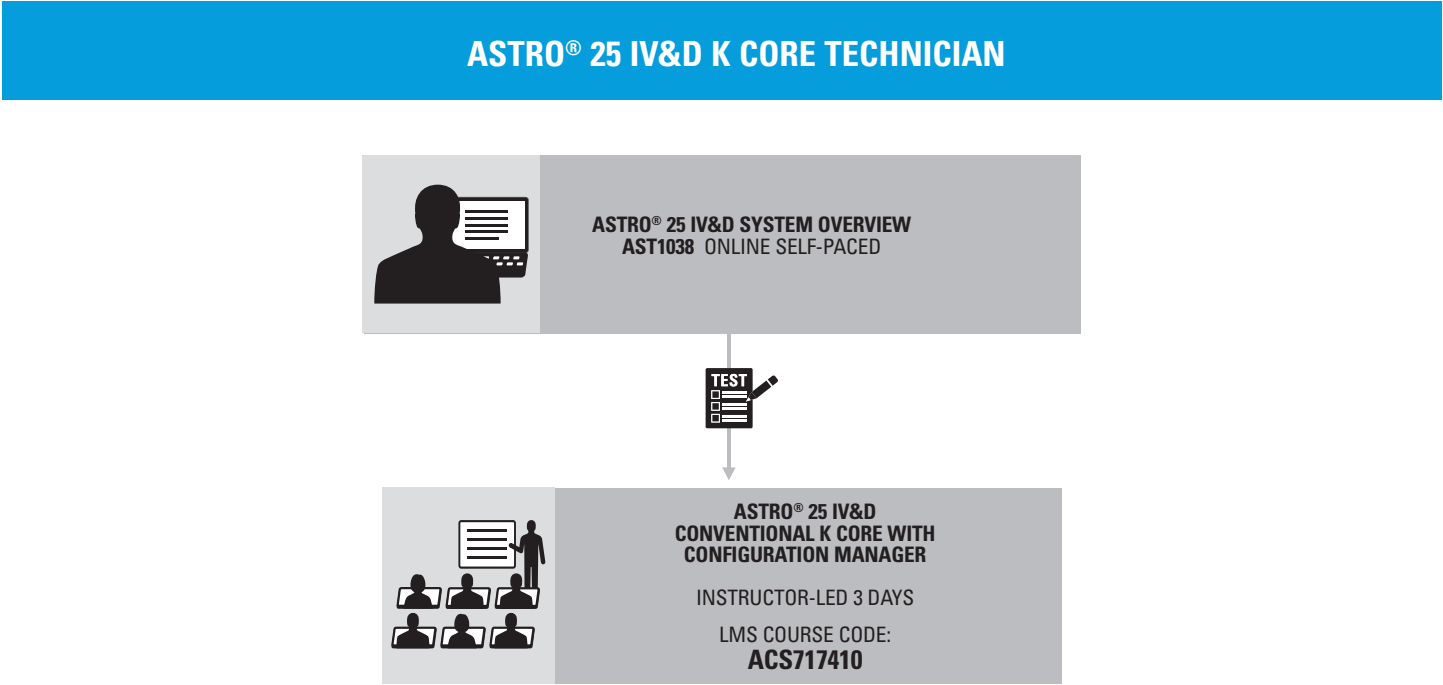
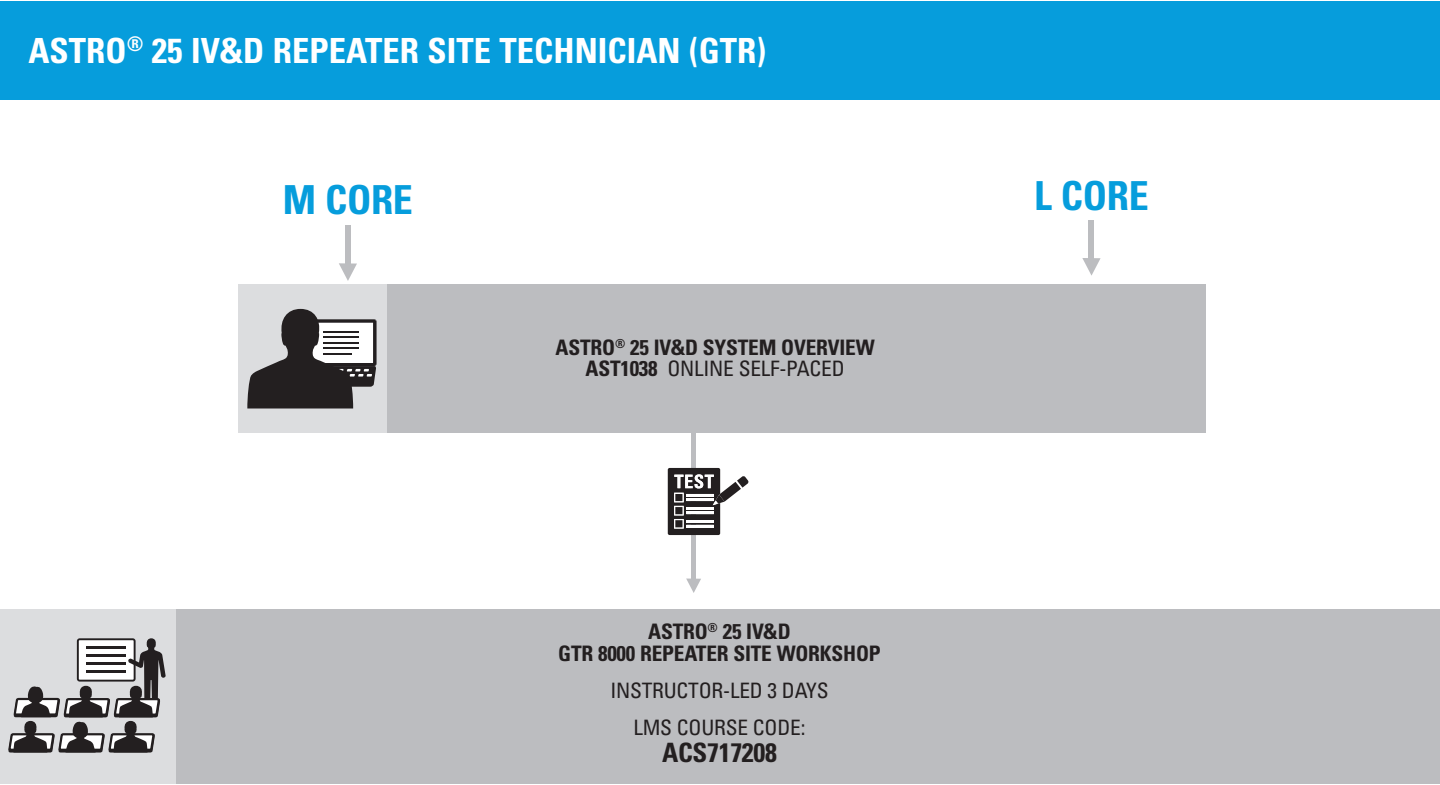
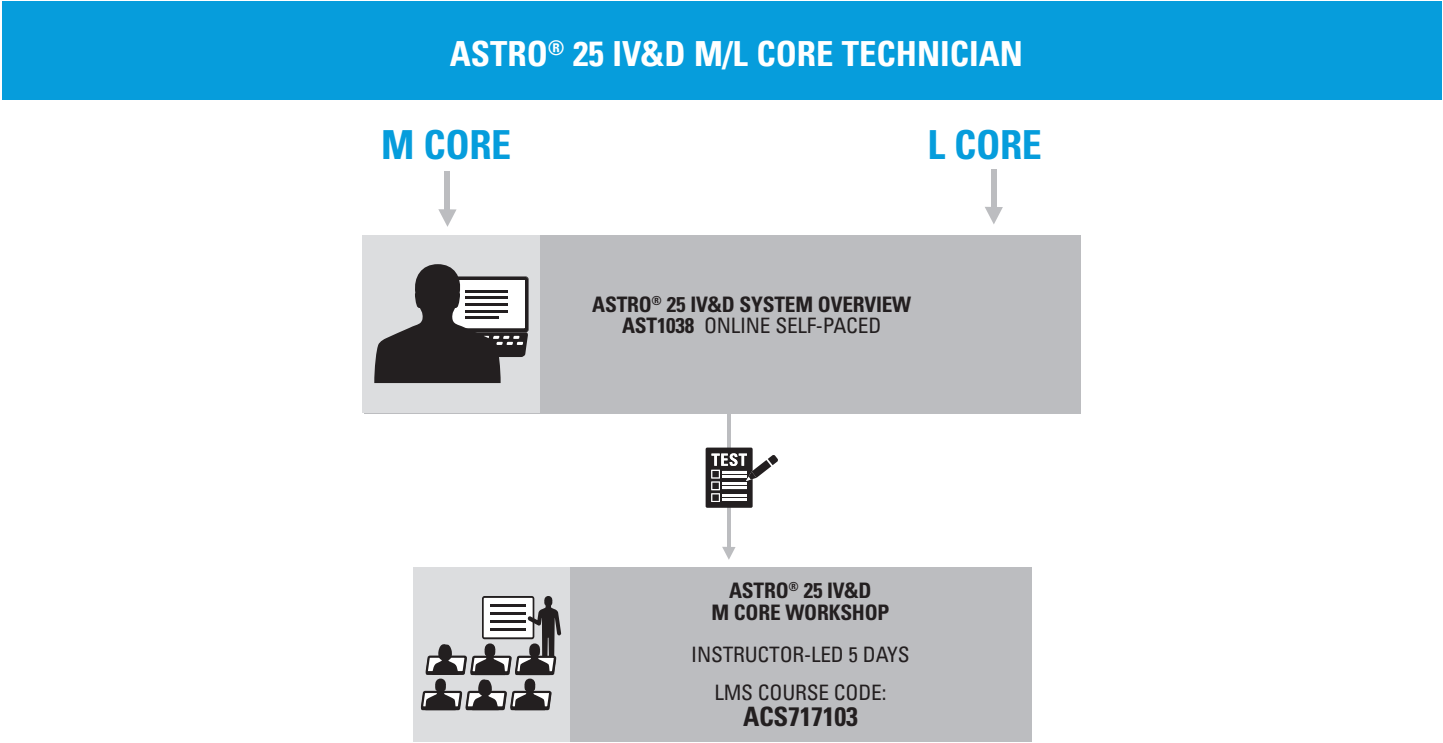
ASTRO® 25 IV&D RADIO SYSTEM ADMINISTRATOR



RECOMMENDED CURRICULUM IS COMPLETE

PARTICIPANT SHOULD BE ABLE TO CARRY OUT ADMINISTRATIVE TASKS IN THE ASTRO® 25 IV&D SYSTEM SUCH AS: PROVISIONING SUBSCRIBERS AND TALK GROUPS, GENERATING HISTORICAL REPORTS, CONTROLLING DEPLOYED SUBSCRIBERS AND MANAGING NETWORK ELEMENT CONFIGURATIONS. PARTICIPANT UNDERSTANDS FACTORS OF SYSTEM CONFIGURATION THAT IMPACT ASTRO® 25 SYSTEM MANAGEMENT.

 **OPTIONAL TRAINING
ROADMAP AVAILABLE.
CLICK ON THIS LINK TO
GO TO PAGE 26 FOR
ADDITIONAL DETAILS.**



RECOMMENDED CURRICULUM IS COMPLETE

PARTICIPANT CAN MAINTAIN AN ASTRO® 25 REPEATER SITE INCLUDING: GTR8000 BASE STATION, GCP8000 SITE CONTROLLER AND OTHER SITE EQUIPMENT.
*PARTICIPANT PERFORMS ALIGNMENTS TROUBLESHOOTING AND FIELD REPLACEMENT OF SITE DEVICES DURING COURSE.

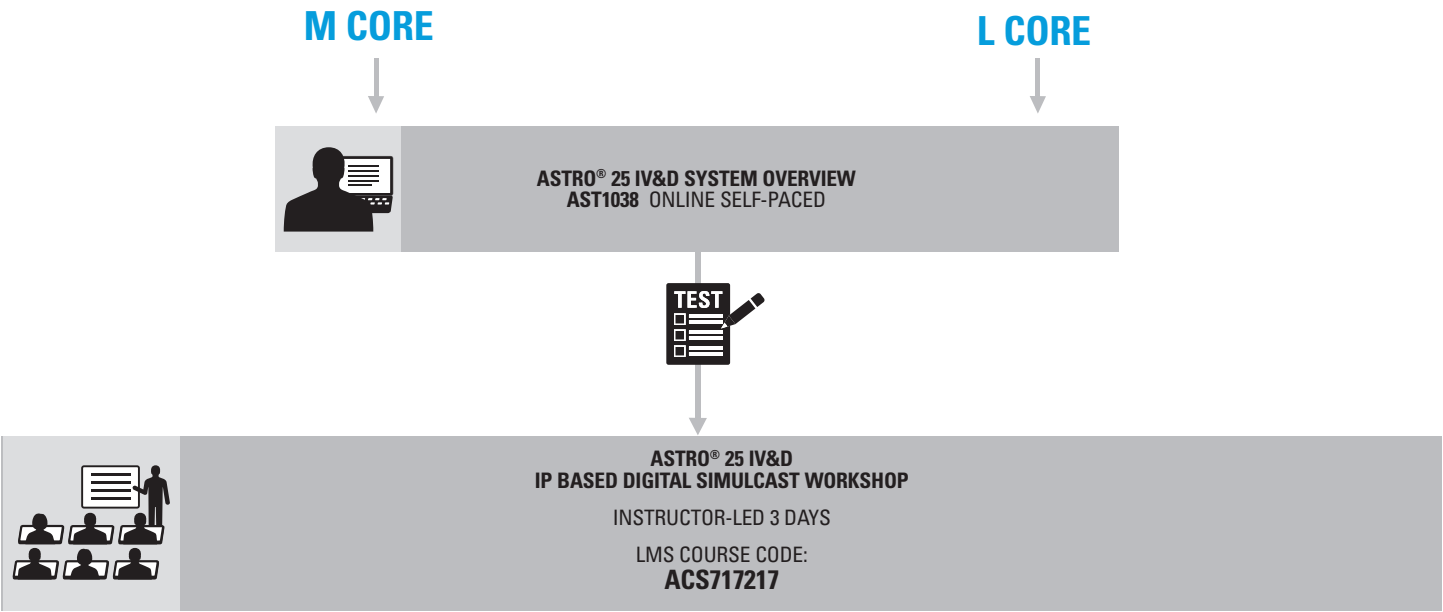
RECOMMENDED CURRICULUM IS COMPLETE

PARTICIPANT SHOULD UNDERSTAND ASTRO® 25 M CORE COMPONENTS, VIRTUAL SERVERS AND SERVICE STRATEGY. PARTICIPANT CAN INTERPRET SYSTEM ALARMS, PROPOSE SOLUTIONS FOR SYSTEM FAILURES, AND AS WELL AS RESTORING EQUIPMENT TO PROPER FUNCTIONALITY.

 OPTIONAL TRAINING ROADMAP AVAILABLE. [CLICK ON THIS LINK TO GO TO PAGE 26 FOR ADDITIONAL DETAILS.](#)

 OPTIONAL TRAINING ROADMAP AVAILABLE. [CLICK ON THIS LINK TO GO TO PAGE 26 FOR ADDITIONAL DETAILS.](#)

ASTRO® 25 IV&D IP SIMULCAST SITE TECHNICIAN

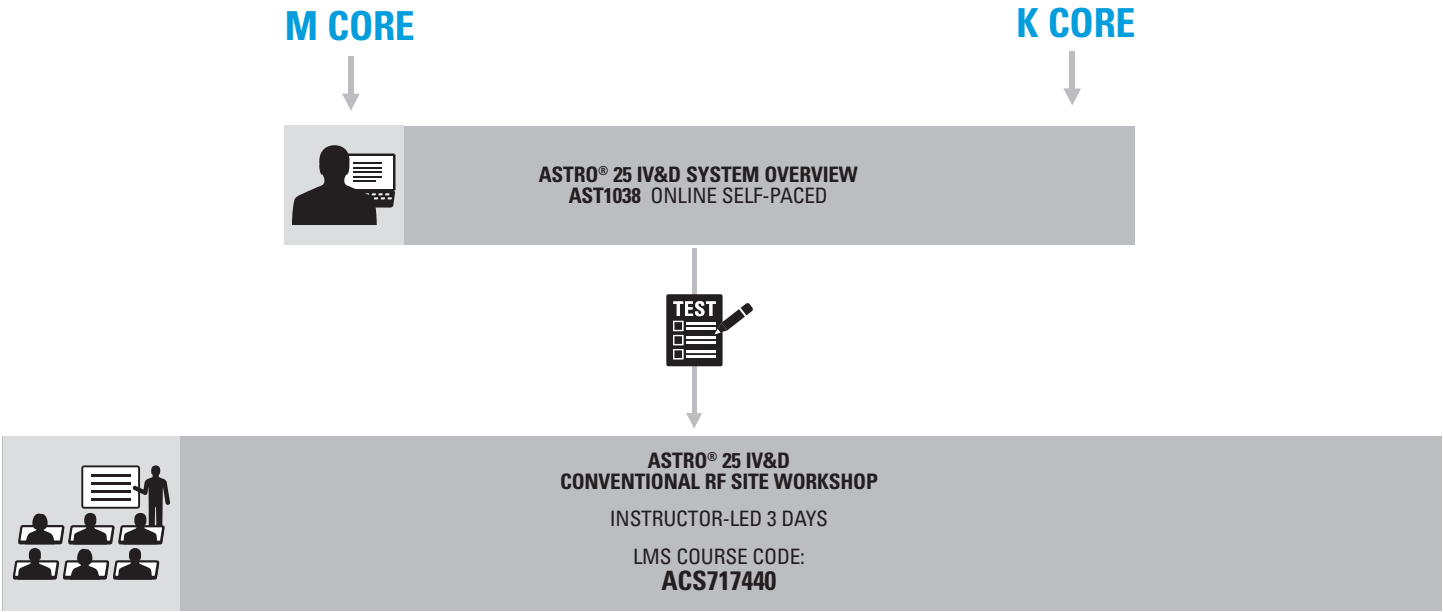


RECOMMENDED CURRICULUM IS COMPLETE

PARTICIPANT SHOULD BE ABLE TO MAINTAIN AN ASTRO® 25 REPEATER SITE INCLUDING THE GTR8000 BASE STATION, GCP8000 SITE CONTROLLER, SITE COMPARATOR AND OTHER SITE EQUIPMENT.

OPTIONAL TRAINING ROADMAP AVAILABLE. [CLICK ON THIS LINK TO GO TO PAGE 26 FOR ADDITIONAL DETAILS.](#)

ASTRO® 25 IV&D CONVENTIONAL RF SITE TECHNICIAN



RECOMMENDED CURRICULUM IS COMPLETE

PARTICIPANT SHOULD BE ABLE TO MAINTAIN AN ASTRO® 25 REPEATER SITE INCLUDING THE GTR8000 BASE STATION, GCP8000 SITE CONTROLLER, SITE COMPARATOR AND OTHER SITE EQUIPMENT.

OPTIONAL TRAINING ROADMAP AVAILABLE. [CLICK ON THIS LINK TO GO TO PAGE 26 FOR ADDITIONAL DETAILS.](#)

RADIO SOLUTIONS **ASTRO® 25 IV&D SYSTEMS**

For information on prerequisites and to register for courses visit the LMS at:
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For general information contact the Latin America Education Services help desk at:
training.LACR@motorolasolutions.com

ASTRO® IV&D OPTIONAL TRAINING CURRICULUM

Motorola Solutions offers optional training for those participants who have completed their ASTRO® 25 curriculum and want to learn more about their system’s infrastructure and/or features.

Select the training course below applicable to your system.

DYNAMIC SYSTEM RESILIENCE

ASTRO® 25 IV&D DYNAMIC SYSTEM RESILIENCE
ONLINE SELF-PACED
ACS715023

SMART X TO SUPPORT CIRCUIT-BASED RF SITES

ASTRO® 25 IV&D INTERFACING SMARTZONE 3600 SYSTEMS
ONLINE SELF-PACED
ACS713360

NETWORK SECURITY

ASTRO® 25 IV&D INFORMATION ASSURANCE
ONLINE SELF-PACED
ACS713211

TELEPHONE INTERCONNECTION

ASTRO® 25 IV&D ENHANCED TELEPHONE INTERCONNECT
ONLINE SELF-PACED
ACS715480

SECURITY PATCH MANAGEMENT

ASTRO® 25 IV&D SECURITY PATCH MANAGEMENT
INSTRUCTOR-LED
AST2001

SYSTEMS FLEETMAPPING

ASTRO® 25 IV&D ISYSTEMS FLEETMAPPING
INSTRUCTOR-LED
RDS1017

RADIO AUTHENTICATION

ASTRO® 25 IV&D RADIO AUTHENTICATION
INSTRUCTOR-LED
AST2038

DOMAIN CONTROLLER ADMINISTRATION

ASTRO® 25 IV&D DOMAIN CONTROLLER ADMINISTRATION
INSTRUCTOR-LED
AST2015

RADIO SOLUTIONS **ASTRO® 25 IV&D SYSTEMS**

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training.LACR@motorolasolutions.com

ASTRO® 25 IV&D SYSTEM OVERVIEW

COURSE OVERVIEW

The ASTRO® 25 IV&D System Overview course will provide participants with knowledge and understanding of the ASTRO® 25 IV&D system. This course will address M, L and K Core systems. System architecture, components and features will be explained. In addition, RF and console sites and their architecture, features and components will be discussed. Finally, call processing for voice and mobile data applications will be covered, and an introduction to applications available in the ASTRO® 25 system will be provided.

AUDIENCE

Core Technicians, Site Technicians, Console Technicians, Core Managers.

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Understand the general architecture of an ASTRO® 25 IV&D Radio System
- Understand key features of available in the ASTRO® 25 IV&D Radio System
- Understand the components of the ASTRO® 25 Zone Core
- Understand site components in the ASTRO® 25 system
- Understand the features,capabilities and components of the MCC7000 series dispatch consoles
- Understand concepts of Mobility and Call Processing in the ASTRO25
- Understand the applications for managing the ASTRO® 25 system

REQUISITE KNOWLEDGE

None



ONLINE, SELF-PACED
LENGTH: 4 HOURS
LMS COURSE CODE:
AST1038

NEW FEATURES INTRODUCTION FOR ASTRO® 25 IV&D SYSTEMS

COURSE OVERVIEW

This course describes the new features introduced in the ASTRO® 25 7.17 system release. These features are broadly classified into migration related features, efficiency and safety related features, resilience and reliability related features, network management and design related features, system capacity related features and inter-system communication related features. Optional features are introduced along with standard enhancements in this release.

AUDIENCE

System Administrators, System Technicians, Field Technicians, Application Users

COURSE OBJECTIVES


After completing this course, the student will be able to:

- Describe the standard enhancements in the ASTRO® 25 7.17 system release
- Describe optional enhancements in the ASTRO® 25 7.17 system release
- Describe the key optional features available in the ASTRO® 25 7.17 system release

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- ASTRO® 25 IV&D Curriculum (Release 7.9 or later) or equivalent knowledge for supported job role



VIRTUAL CLASSROOM
LENGTH: 2 HOURS
LMS COURSE CODE:
AST1029

ASTRO® 25 IV&D M CORE WORKSHOP

COURSE OVERVIEW

The ASTRO® 25 IV&D with M Core course teaches troubleshooting skills and best practices for the Trunked Large Systems. The course also focuses on gathering and analyzing system information to implement appropriate action(s) that return a system to full operational status.

AUDIENCE

M Core Master Site Technicians

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Describe the ASTRO® 25 IV&D System architecture
- Identify the functional and radio subsystems that comprise the ASTRO® 25 IV&D System
- Explain and discuss call flow and data flow through ASTRO® 25 IV&D M Core devices and their subsystems
- Perform recommended routine maintenance procedures for ASTRO® 25 IV&D M Core
- Utilize the troubleshooting tools to diagnose a fault and restore the ASTRO® 25 IV&D M Core to the level of the Motorola Solutions-supported service strategy

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- Bridging the Knowledge Gap for ASTRO® 25 – Technician (ACT100E)
- Networking Essentials in Communication Equipment (NST762)
- ASTRO® 25 Systems Applied Networking (NWT003)

Required:

- ASTRO® 25 IV&D System Overview (AST1038)



INSTRUCTOR-LED
LENGTH: 5 DAYS
LMS COURSE CODE:
ACS717103

RADIO SOLUTIONS **ASTRO® 25 IV&D SYSTEMS**

For information on prerequisites and to register for courses visit the LMS at:
LEARNING.MOTOROLASOLUTIONS.COM

For general information contact the Latin America Education Services help desk at:
training.LACR@motorolasolutions.com

**ASTRO® 25 IV&D
CONVENTIONAL K CORE WITH
CONFIGURATION MANAGER**

COURSE OVERVIEW

The ASTRO® 25 IV&D Conventional with K Core and Configuration Manager course teaches advanced troubleshooting skills and best practices for the ASTRO® 25 IV&D Conventional K Core. It also focuses on administrator functions and how to use the ASTRO® 25 IV&D Configuration Manager applications. A technical introduction to the MCC 7000 series consoles as used within the ASTRO® 25 IV&D Conventional K Core, including some administrator functions, is also provided. Learning activities focus on gathering and analyzing system information to implement the appropriate actions that return a system to full operational status.

AUDIENCE

Master Site Technicians, System Administrators, Technical System Administrators, System Technicians and other Application Users

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Understand key physical and functional characteristics of K Core conventional system.
 - Perform tasks necessary to install K Core conventional system components.
 - Perform configuration steps for K Core conventional system components.
 - Understand available maintenance tools and indicators in K Core conventional system.

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- Bridging the Knowledge Gap – System Administrators (ACT101E)
 - Networking Essentials in Communication Equipment (NST762)
 - ASTRO® 25 Applied Networking (NWT003)
 - ASTRO® 25 IV&D System Overview (AST1038)



INSTRUCTOR-LED
LENGTH: **3 DAYS**
LMS COURSE CODE:
ACS717410

**ASTRO® 25 IV&D RADIO SYSTEM
ADMINISTRATOR WORKSHOP**

COURSE OVERVIEW

This workshop covers administrator functions for an ASTRO® 25 IV&D System. Learning activities in this course focus on how to use the different ASTRO® 25 IV&D System Management applications. Participants will be provided with an opportunity to discuss how to structure their organization and personnel for optimal ASTRO® 25 IV&D system use.

AUDIENCE

System Administrators, Technical System Administrators, System Technicians, and other Application Users

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe the relationship between radio programming, console administration and system management, and the impact of this relationship on system planning
 - List the network management tools applicable at each phase of the system life cycle
 - Use the report and real-time data to monitor performance and make adjustments necessary to maintain acceptable system performance levels
 - Identify the advantages and disadvantages of options available for the configuration of system infrastructure and user parameters

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- Bridging the Knowledge Gap – System Administrators (ACT101E)
 - Networking Essentials in Communication Equipment (NST762)
 - ASTRO® 25 Applied Networking (NWT003)
 - ASTRO® 25 IV&D System Overview (AST1038)



INSTRUCTOR-LED
LENGTH: **5 DAYS**
LMS COURSE CODE:
ACS717102

**ASTRO® 25 SYSTEMS
FLEETMAPPING**

COURSE OVERVIEW

This workshop addresses topics necessary for the effective planning and mapping of an ASTRO® 25 IV&D radio system. During this course, the participants will learn about ASTRO® 25 features, capabilities, and restrictions in order to effectively plan and prepare for a new or upgraded ASTRO® 25 system.

AUDIENCE


Pre-sale customers, new system managers, system planning personnel

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Discuss what a fleetmap is and why one is needed.
 - Discuss the methodologies used to configure radio users and groups with the goal of optimizing the system resources.
 - Describe the content to assist with fleetmapping decisions.
 - Discuss frequency band plan organization and management.
 - Describe basic planning requirements and complete a simple Fleetmap information template.
 - Complete worksheets required to create a Fleetmap based on sample operational requirement information.

REQUISITE KNOWLEDGE

None



INSTRUCTOR-LED
LENGTH: **5 DAYS**
LMS COURSE CODE:
RDS1017

RADIO SOLUTIONS **ASTRO® 25 IV&D SYSTEMS**

For information on prerequisites and to register for courses visit the LMS at:
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For general information contact the Latin America Education Services help desk at:
training.LACR@motorolasolutions.com

**ASTRO® 25 SECURITY
PATCH MANAGEMENT**

COURSE OVERVIEW

Provide Motorola Solutions ASTRO® 25 Land Mobile Radio (LMR) system administrators the information to access and patch their radio system infrastructure, update antivirus definitions, review log files and understand account management.

AUDIENCE


M Core Master Site Technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Successfully access servers in the M-Core
 - Successfully patch their radio system infrastructure
 - Update Anti-virus (A/V) Definitions for their radiosystem infrastructure
 - Perform basic review of UNIX logs
 - Create user and group accounts
 - Assist with basic tasks in Account Management on the LMR system

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- ASTRO® 25 IV&D M Core Workshop (ACS717103)



INSTRUCTOR-LED
LENGTH: **4 DAYS**
LMS COURSE CODE:
AST2001

ASTRO® 25 RADIO AUTHENTICATION

COURSE OVERVIEW

This course describes the Radio Authentication feature and defines the HW/SW components in the Radio Authentication system. In addition the course describes the Radio Authentication process, discusses the various Keys uses in Radio Authentication. The students will understand how to provision and distribute relevant Keys using the AuC Client GUI to access the AuC Server. Students will understand how to enable Radio Authentication in the System via the AuC Client and how to configure the KVL 4000 for Radio Authentication and manage subscribers from the AuC Client.

AUDIENCE

Customer Administrators or Technicians.

COURSE OBJECTIVES


- After completing this course, the student will be able to:
- Describe Radio Authentication features and HW/ SW components
 - Describe the Radio Authentication process.
 - Discuss the Keys used in Radio Authentication
 - Provision and Distribute relevant Keys.
 - Describe the AuC Client GUI
 - Enable Radio Authentication in the System.
 - Configure the KVL 4000 for Radio Authentication
 - Manage Subscribers from the AuC Client.
 - Discuss Radio Authentication functionality in a DSR system

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- AAE1400 - Radio Authentication e-learning course.
 - Radio System Administration or equivalent knowledge of the Provisioning Manager, ZoneWatch, Historical Reports, ATIA Log Viewer, Unified Event Manager (UEM), Unified Network Configurator (UNC).

Required:

Access to customer ASTRO25 Radio System, AuC Server/Client is required. Customer to provide working Motorola Solutions' portable radio(s) capable of placing calls on the System, access to working AuC client/server along with admin login credentials, access to a working KVL4000 key loader that can upload keys to the AuC server.



INSTRUCTOR-LED
LENGTH: **2 DAYS**
LMS COURSE CODE:
AST2038

RADIO SOLUTIONS **ASTRO® 25 IV&D SYSTEMS**

For information on prerequisites and to register for courses visit the LMS at:
LEARNING.MOTOROLASOLUTIONS.COM

For general information contact the Latin America Education Services help desk at:
training.LACR@motorolasolutions.com

ASTRO® 25 IV&D SECURE COMMUNICATIONS WORKSHOP

COURSE OVERVIEW

This workshop describes planning, installation, configuration, operations, and troubleshooting of Secure Communications within the ASTRO® 25 IV&D System.

AUDIENCE

System Technicians, System Administrators, Technical System Managers

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Plan, organize, and implement Secure Communications in an ASTRO® 25 IV&D system
 - Install and configure a Key Management Facility (KMF) system and related components
 - Demonstrate centralized key management using Over-the-Air-Rekeying (OTAR)
 - Perform System Administrator functions using the KMF server and KMF client
 - Troubleshoot installation and configuration problems for the KMF server, KMF client, and KMF database
 - Implement end-to-end encryption using the MCC 7500 console subsystem

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- Bridging the Knowledge Gap for ASTRO® 25 (ACT100E or ACT101E)
 - Networking Essentials in Communication Equipment (NST762)



INSTRUCTOR-LED
LENGTH: **5 DAYS**
LMS COURSE CODE:
ACS717207

ASTRO® 25 IV&D IP BASED DIGITAL SIMULCAST WORKSHOP

COURSE OVERVIEW

The ASTRO® 25 IV&D IP Based Digital Simulcast workshop provides an understanding of the components that comprise the ASTRO® 25 IV&D IP Simulcast subsystem, and how they operate in conjunction with each other. The workshop also explains the tools and methods available for troubleshooting components within the IP Based Simulcast subsystem.

AUDIENCE

Simulcast Site Technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Recognize the flow of message and control data within an ASTRO® 25 IV&D IP Digital Simulcast subsystem
 - Identify the major components and connections within an ASTRO® 25 IV&D IP Digital Simulcast subsystem prime and remote sites
 - Recognize how calls are processed within an ASTRO® 25 IV&D IP Digital Simulcast subsystem
 - Perform maintenance and troubleshooting of select components in an ASTRO® 25 IV&D IP Digital Simulcast subsystem

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- Bridging the Knowledge Gap for ASTRO® 25 – Technician (ACT100E)
 - Networking Essentials in Communication Equipment (NST762)
 - ASTRO® 25 Systems Applied Networking (NWT003)

Required:

- ASTRO® 25 IV&D System Overview (AST1038)



INSTRUCTOR-LED
LENGTH: **3 DAYS**
LMS COURSE CODE:
ACS717217

ASTRO® 25 IV&D GTR 8000 REPEATER SITE WORKSHOP

COURSE OVERVIEW

This workshop describes the components in the ASTRO® 25 IV&D System Repeater Site with GTR 8000 expandable site subsystem. This course also presents how the GTR 8000 expandable site subsystem operates and explains the tools and methods available for troubleshooting components within the subsystem.

AUDIENCE

GTR 8000 Site Technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe the ASTRO® 25 IV&D Repeater Site with GTR 8000 Expandable Site Subsystem configurations and components
 - Identify the GCP 8000 Site Controller functions and configuration requirements
 - Describe the connections and interfaces to the GCP 8000
 - Diagnose and troubleshoot the GCP 8000
 - Describe the functionality of the GTR 8000 Expandable Site Subsystem
 - Configure and troubleshoot the ASTRO® 25 Repeater Site with GTR 8000 Expandable Site Subsystem
 - Configure and troubleshoot the Network Transport subsystem

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- Bridging the Knowledge Gap for ASTRO® 25 – Technician (ACT100E)
 - Networking Essentials in Communication Equipment (NST762)
 - ASTRO® 25 Systems Applied Networking (NWT003)

Required:

- ASTRO® 25 IV&D System Overview (AST1038)



INSTRUCTOR-LED
LENGTH: **3 DAYS**
LMS COURSE CODE:
ACS717208

RADIO SOLUTIONS **ASTRO® 25 IV&D SYSTEMS**

For information on prerequisites and to register for courses visit the LMS at:
LEARNING.MOTOROLASOLUTIONS.COM

For general information contact the Latin America Education Services help desk at:
training.LACR@motorolasolutions.com

ASTRO® 25 IV&D CONVENTIONAL RF SITE WORKSHOP

COURSE OVERVIEW

The ASTRO® 25 IV&D Conventional RF Site workshop describes the components in the different ASTRO® 25 IV&D Conventional RF Sites topologies. This course also presents how the different ASTRO® 25 IV&D Conventional RF Sites topologies operate and explains the tools and methods available for troubleshooting components within the different ASTRO® 25 IV&D Conventional RF Sites topologies.

AUDIENCE

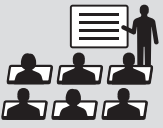
Site Technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Understand key physical and functional characteristics of conventional site.
 - Perform tasks necessary to install conventional site components.
 - Perform configuration steps for conventional site components.
 - Understand available maintenance tools and indicators in conventional site.

REQUISITE KNOWLEDGE

- Completion of the following courses or equivalent knowledge:
- Bridging the Knowledge Gap – System Administrators (ACT101)
 - Networking Essentials in Communication Equipment (NST762)
 - ASTRO® 25 Applied Networking (NWT003)
 - ASTRO® 25 IV&D System Overview (AST1038)



INSTRUCTOR-LED
LENGTH: **3 DAYS**
LMS COURSE CODE:
ACS717440

ASTRO® 25 DOMAIN CONTROLLER ADMINISTRATION

COURSE OVERVIEW

This workshop covers the administrator and management functions in the ASTRO® 25 Domain Controller and how these functions affect both users and computers in the ASTRO® 25 system. Learning activities in this course focus on how to use the Domain Controllers to authenticate, administer, and authorize users and devices in the ASTRO® 25 System. Group Policies and Organizational Units, RADIUS, and DNS structure will be addressed during this course.

AUDIENCE

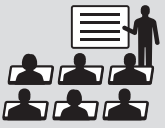
Console Technicians, System Managers

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Understand the Domain Controller server platform
 - Understand the DNS Hierarchy in the ASTRO® 25 system
 - Implement RADIUS authentication in applicable devices in an ASTRO® 25 system.
 - Use Active Directory to control users in the ASTRO® 25 system.
 - Understand Group Policy objects and how they impact users in the ASTRO® 25 Domain.

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- ASTRO® 25 IV&D System Overview (AST1038)



INSTRUCTOR-LED
LENGTH: **3 DAYS**
LMS COURSE CODE:
AST2015

INTELLIGENT MIDDLEWARE 5.2 OPERATION AND ADMINISTRATION

COURSE OVERVIEW

The purpose of this course is to provide the steps to operate and maintain a customer's IMW system within their Motorola Solutions system (ASTRO, DIMETRA, LTE).

AUDIENCE


Partners/Resellers and customers who would be responsible for the operation and maintenance of a customer's IMW system within their Motorola Solutions systems (ASTRO, DIMETRA, LTE).

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe IMW features.
 - Perform installation of IMW.
 - Configure an IMW system.
 - Identify the IMW tools to administer the system.
 - Perform routine administration.
 - Perform troubleshooting.
 - Understand system-specific considerations.

REQUISITE KNOWLEDGE

None



INSTRUCTOR-LED
LENGTH: **2 DAYS**
LMS COURSE CODE:
RDS2025

RADIO SOLUTIONS **ASTRO® 25 IV&D SYSTEMS**

For information on prerequisites and to register for courses visit the LMS at: LEARNING.MOTOROLASOLUTIONS.COM

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

**ASTRO® 25 ISSI 8000 / CSSI 8000
FEATURE OVERVIEW**

COURSE OVERVIEW

The ISSI 8000 / CSSI 8000 Feature Overview self-paced course describes the optional Inter-RF Subsystem Interface available in an ASTRO® 25 IV&D System. It presents a description of the feature, its benefits and components, call processing scenarios, and an overview of the installation process.

AUDIENCE

System Managers, Technical System Managers, System Technicians, Application Users

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe the ISSI 8000 / CSSI 8000 feature
 - Describe the components of the ISSI 8000 / CSSI 8000 feature
 - Describe the communication scenarios if this feature is enabled
 - Follow the installation and configuration process if this feature is added to an ASTRO system

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- Bridging the Knowledge Gap for ASTRO® 25 – Technician (ACT100E)

Required:

- ASTRO® 25 IV&D System Overview (AST1038)



ONLINE, SELF-PACED
LENGTH: 4 HOURS
LMS COURSE CODE:
AST2005

**ASTRO® 25 IV&D DYNAMIC
SYSTEM RESILIENCE**

COURSE OVERVIEW

The ASTRO® 25 IV&D Dynamic System Resilience (DSR) Overview is a self-study training course intended to provide a technical overview of DSR. The course describes how DSR adds a geographically separate backup for the Master Site to protect against a catastrophic failure.

AUDIENCE

System Administrators, System Technicians, Field Technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Differentiate between a non-DSR Master Site and a DSR Master Site
- Describe the DSR components, operation and functionality of each of the following services:
- Voice
 - Data
 - Network Management
 - Network Transport
 - IP Services
 - MOSCAD

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- ASTRO® 25 IV&D System Overview (AST1038)



ONLINE, SELF-PACED
LENGTH: 2 HOURS
LMS COURSE CODE:
ACS715023

**ASTRO® 25 IV&D INTERFACING
SMARTZONE 3600 SYSTEMS**

COURSE OVERVIEW

ASTRO® 25 IV&D Trunked System - Interfacing SmartZone 3600 Systems with SmartX is designed to allow communication between subscriber radios at existing 3600 RF sites and an ASTRO® 25 IV&D system. It is based on the Voice Processor Module hardware platform and enables the continued use of 3600 RF sites and subscriber radios with the release of ASTRO® 25 7.7 or higher. This self-study training course is intended to provide information related to the installation and functionality of, including the hardware and software associated with, the SmartX Site Converter in the ASTRO® 25 IV&D.

AUDIENCE

System Administrators, System Technicians, Field Technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe the SmartX Site Converter and its operation within the system
 - Identify the major components and functionality.
 - Know the requirements and components necessary to install a SmartX Site Converter

REQUISITE KNOWLEDGE

None



ONLINE, SELF-PACED
LENGTH: 1 HOUR
LMS COURSE CODE:
ACS713360

RADIO SOLUTIONS **ASTRO® 25 IV&D SYSTEMS**

For information on prerequisites and to register for courses visit the LMS at: LEARNING.MOTOROLASOLUTIONS.COM

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

**ASTRO® 25 IV&D ENHANCED
TELEPHONE INTERCONNECT**

COURSE OVERVIEW

This web based course describes the functionality and the hardware and software associated with the Enhanced Telephone Interconnect feature in the ASTRO® 25 IV&D System.

AUDIENCE

System Technicians, System Administrators

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Identify the function and major components for the Enhanced Telephone Interconnect feature
 - Define the operation of the Enhanced Telephone Interconnect feature within the system
 - Configure the Enhanced Telephone Interconnect equipment
 - Troubleshoot the Enhanced Telephone Interconnect equipment

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- Bridging the Knowledge Gap for ASTRO® 25 (ACT100E or ACT101E)
 - Networking Essentials in Communication Equipment (NST762)



ONLINE, SELF-PACED
LENGTH: 2 HOURS
LMS COURSE CODE:
ACS715480

**SYSTEM OVERVIEW FOR ASTRO® 25
IV&D INFORMATION ASSURANCE**

COURSE OVERVIEW

This web based course describes the functionality and the hardware and software associated CNI Network Security in the ASTRO® 25 IV&D System.

AUDIENCE

System Administrators, System Technicians, Field Technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Define network security and its functions
 - List the network security components of an ASTRO® 25 IV&D system
 - Define the functions, components and operation of the Core Server Management Server (CSMS)
 - Identify the functions, components and operation of the Interface Barrier (NIB)
 - Identify the functions, components and operation of the border router and the peripheral network router

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- Bridging the Knowledge Gap for ASTRO® 25 (ACT100E or ACT101E)
 - Networking Essentials in Communication Equipment (NST762)
 - ASTRO® 25 Systems Applied Networking (NWT003)

Required:

- Take one of the following depending on system supporting:
- ASTRO®25 IV&D with M Core System Overview (ACS11200-E)
 - ASTRO®25 IV&D Conventional with M Core Overview (ACS11420-E)
 - ASTRO®25 IV&D with L Core System Overview (ACS11430-E)
 - ASTRO®25 IV&D Conventional with K Core System Overview (ACS11400-E)



ONLINE, SELF-PACED
LENGTH: 2 HOURS
LMS COURSE CODE:
ACS713211

**ASTRO® IV&D INTRODUCTION TO
RADIO SYSTEM MANAGEMENT
APPLICATIONS**

COURSE OVERVIEW

This interactive course provides a high-level overview of Motorola radio systems management applications through recorded demonstrations of common system tasks.

AUDIENCE


System administrators, technical system administrators, system technicians and other application users

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe the purpose of Network Management applications used in an ASTRO system
 - Identify the high-level capabilities of network administrator applications
 - Become familiar with the common operations allowed by network administrator applications

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- How to overcome the knowledge gap - Technicians (ACT100E)
- Take one of the following options depending on the system support:
- ASTRO® 25 IV and D with core system M General description (ACS713200)
 - ASTRO® 25 IV & D Conventional with the overview of the core M (ACS713420)
 - ASTRO® 25 IV and D with core system L (ACS715430)



INSTRUCTOR-LED
LENGTH: 1 DAY
LMS COURSE CODE:
AST1074

RADIO SOLUTIONS **ASTRO® 25 IV&D SYSTEMS**

For information on prerequisites and to register for courses visit the LMS at:
[LEARNING.MOTOROLASOLUTIONS.COM](http://learning.motorolasolutions.com)

For general information contact the Latin America Education Services help desk at:
training.LACR@motorolasolutions.com

**ASTRO® 25 IV&D M CORE
SYSTEM OVERVIEW**

COURSE OVERVIEW

The course provides a general description of the architecture, functions and components of an ASTRO version 7.15 trunking system.

AUDIENCE


System administrators, technical system administrators, system technicians, field service technicians.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe architectures with M-core, functions and components.
 - Describe remote sites and their components.
 - Describe types of information and routes used for control, voice and data.
 - Describe the servers and databases used in an ASTRO 25 system with core M.

REQUISITE KNOWLEDGE

None



INSTRUCTOR-LED
LENGTH: **1 DAY**
LMS COURSE CODE:
AST1067

**DEPLOY FOR ASTRO® 25 IV&D
TRUNKING WITH L CORE**

COURSE OVERVIEW

This course provides an overview and implementation plan for deployment of an L1/L2 ASTRO 25 IV&D 7.15 system, contains information and procedures for bringing Motorola Manufacturing Representatives (MRs) up to speed on how to assemble and install the L1/L2 system for customers, and acts as a resource on how to reference other training materials for troubleshooting and additional L1/L2 system tasks.

AUDIENCE

Motorola Manufacturing Representatives (MRs) involved in the installation of L1/L2 systems.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Correctly and efficiently install and locally configure an L Core system that has been staged by CCSi.
 - Perform initial Power On of equipment to verify proper operation.
 - Commission the L Core System once it has been installed.
 - Test the L Core System per Acceptance Test Plans (ATP).
 - Back up the Infrastructure and System Databases of the L Core System.

REQUISITE KNOWLEDGE

- Trunking or knowledge based on system deploying
- Networking: Networking Essentials in Communication Equipment (NST762) or online classes
- R56: Site Installation Practices Workshop (R56) NST925



INSTRUCTOR-LED
LENGTH: **3 DAYS**
LMS COURSE CODE:
ACS715460

**DEPLOY FOR ASTRO® 25 IV&D
CONVENTIONAL WITH K CORE**

COURSE OVERVIEW

This course provides an overview and implementation plan for deployment of an K1/K2 ASTRO 25 IV&D 7.16 system, contains information and procedures for bringing Motorola Manufacturing Representatives (MRs) up to speed on how to install the K1/K2 system for customers, and acts as a resource on how to reference other training materials for troubleshooting and additional K1/K2 system tasks.

AUDIENCE

Motorola Manufacturing Representatives (MRs) involved in the installation of K1/K2 systems.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Correctly and efficiently install and locally configure a K Core system that has been staged by CCSi.
 - Perform initial Power On of equipment to verify proper operation.
 - Commission the K Core System once it has been installed.
 - Test the K Core System per Acceptance Test Plans (ATP).
 - Back up the Infrastructure and System Databases of the K Core System.

REQUISITE KNOWLEDGE

- Conventional RF System knowledge based on system deploying
- Networking: Networking Essentials in Communication Equipment (NST762) or online classes
- R56: Site Installation Practices Workshop (R56) NST925
- ASTRO 25 IV&D with K Core System Overview (ACS714400)



INSTRUCTOR-LED
LENGTH: **3 DAYS**
LMS COURSE CODE:
ACS716470



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 **THE LEARNING
MANAGEMENT
SYSTEM (LMS)**

To register for a course, go to
learning.motorolasolutions.com

 **CLICK HERE TO VIEW THE
SCHEDULE**

TETRA SYSTEMS

For information on prerequisites and to register for courses visit the LMS at:
[LEARNING.MOTOROLASOLUTIONS.COM](https://learning.motorolasolutions.com)

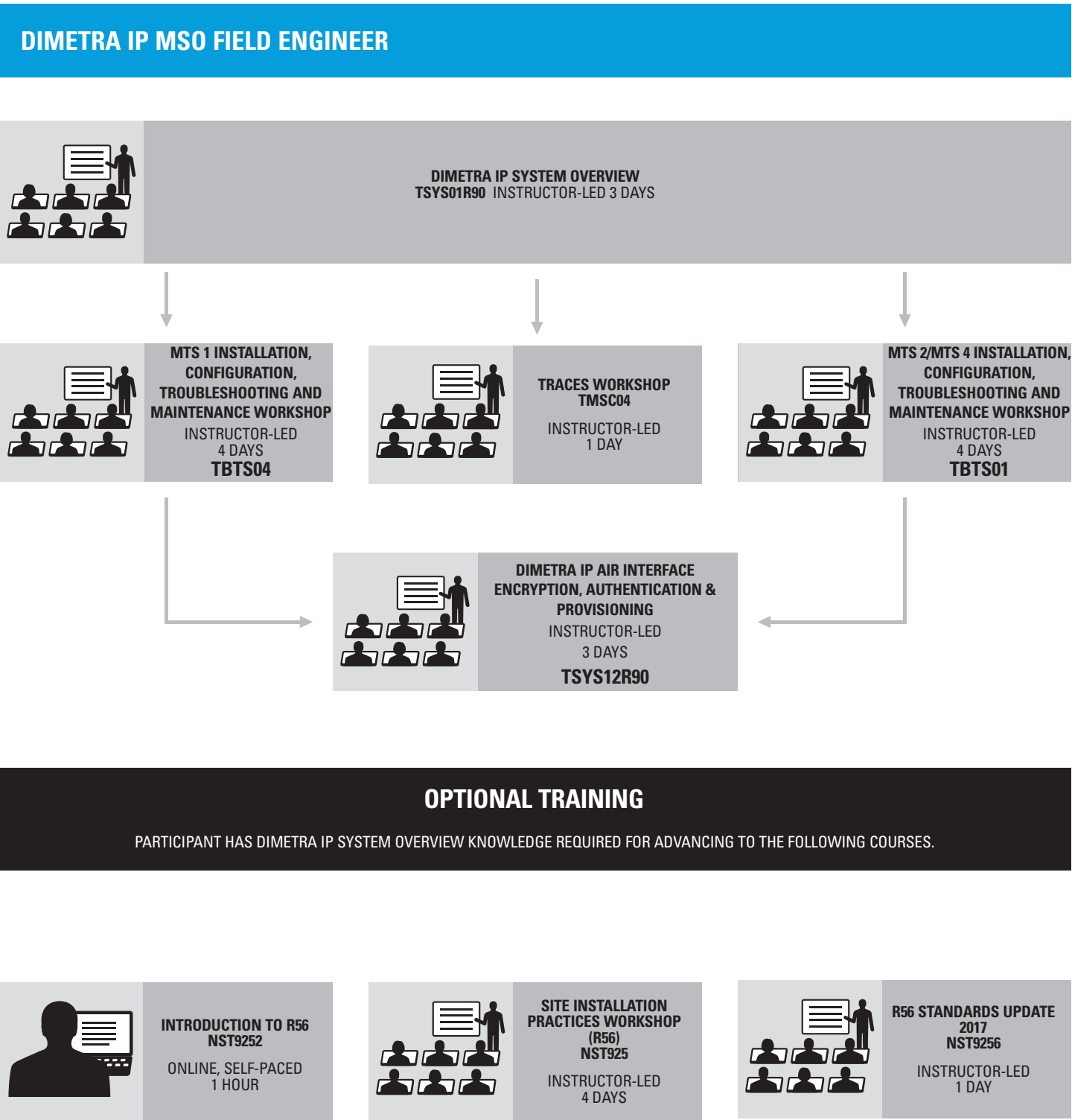
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TETRA SYSTEMS

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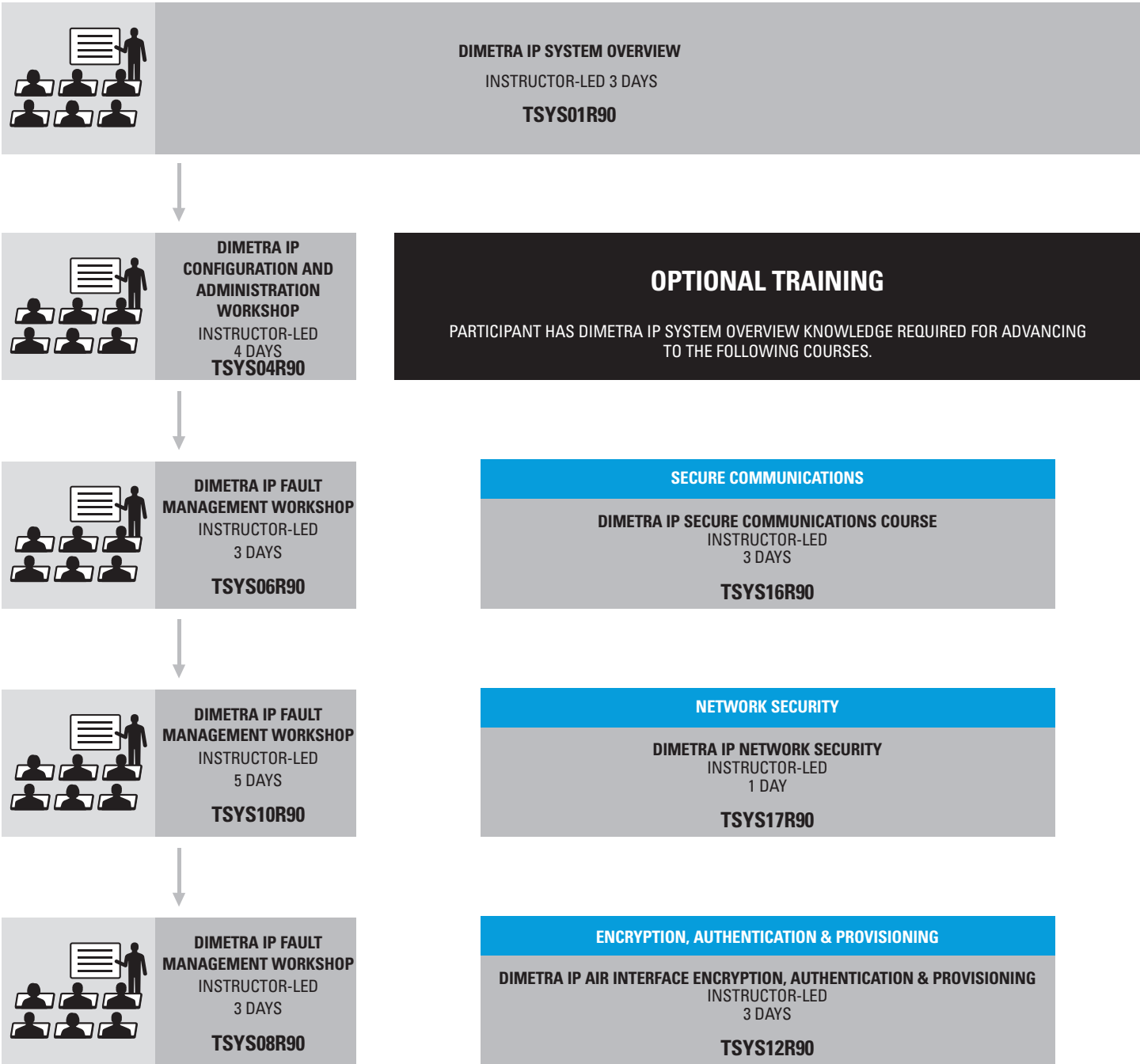


TETRA SYSTEMS

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DIMETRA IP MSO SYSTEM ENGINEER

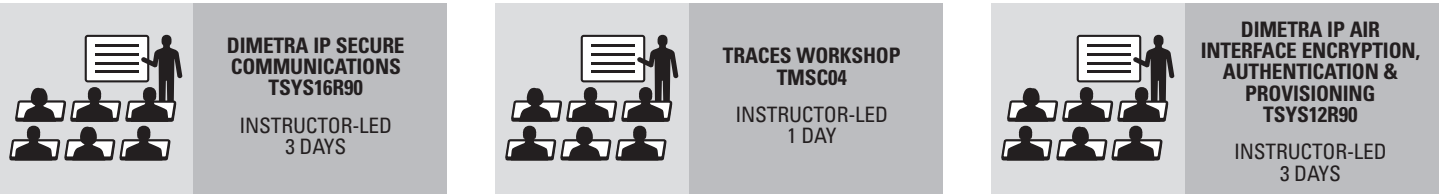
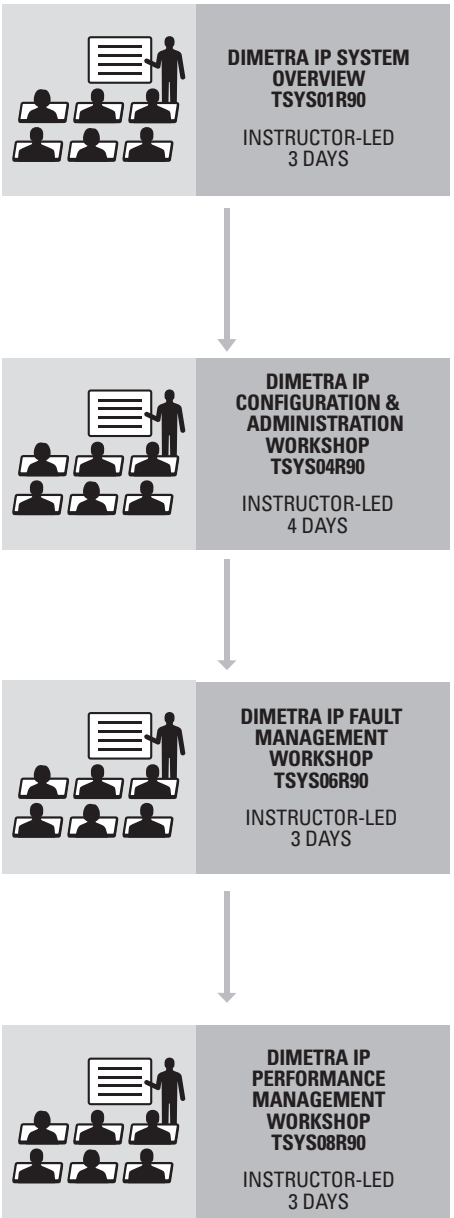


TETRA SYSTEMS

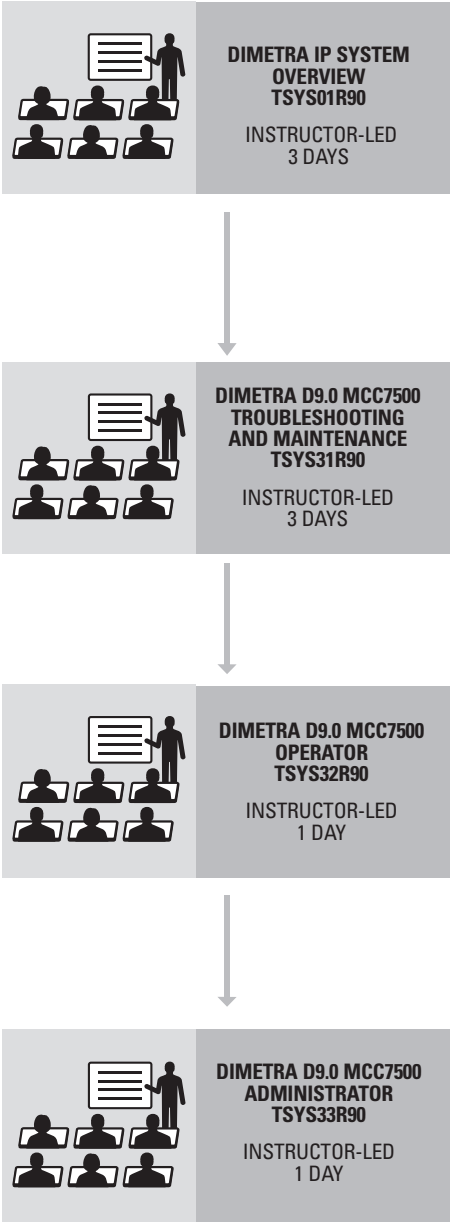
For information on prerequisites and to register for courses visit the LMS at: LEARNING.MOTOROLASOLUTIONS.COM

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

DIMETRA IP SYSTEM ADMINISTRATOR

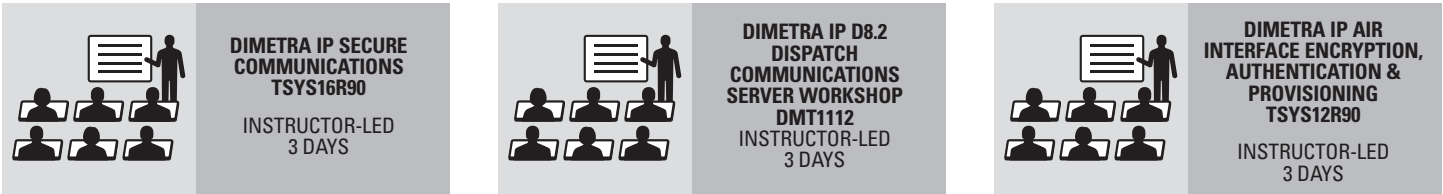


DIMETRA IP DISPATCH ADMINISTRATOR

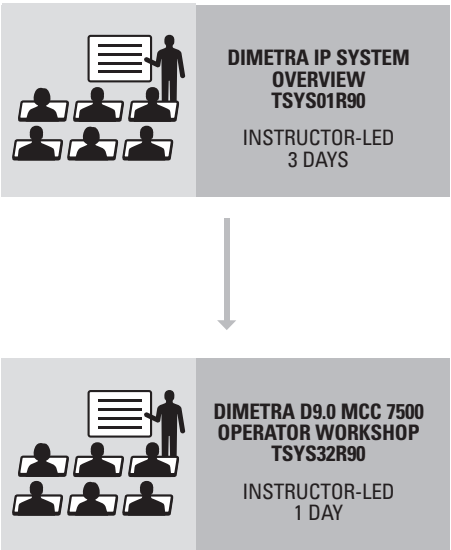


OPTIONAL TRAINING

PARTICIPANT HAS DIMETRA IP SYSTEM OVERVIEW KNOWLEDGE REQUIRED FOR ADVANCING TO THE FOLLOWING COURSES.



DIMETRA IP DISPATCH ADMINISTRATOR

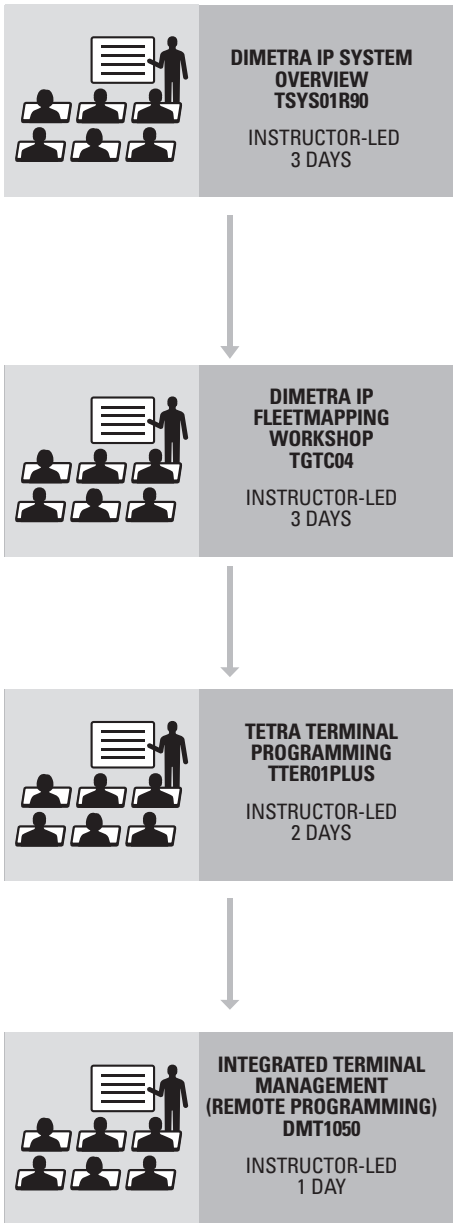


TETRA SYSTEMS

For information on prerequisites and to register for courses visit the LMS at: LEARNING.MOTOROLASOLUTIONS.COM

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

RADIO PROGRAM AND FLEETMAPPING



OPTIONAL TRAINING

PARTICIPANT HAS DIMETRA IP SYSTEM OVERVIEW KNOWLEDGE REQUIRED FOR ADVANCING TO THE FOLLOWING COURSES.



TETRA SYSTEMS

For information on prerequisites and to register for courses visit the LMS at: LEARNING.MOTOROLASOLUTIONS.COM

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

DIMETRA IP SCALABLE (DIPS) D9.0

DIMETRA IP D9.0 SYSTEM OVERVIEW

COURSE OVERVIEW

This course provides an overview of the features and functions of a DIMETRA IP D9.0 system. The course is divided into eight modules and includes descriptions of the various call types and system hardware functionality. An application overview describes the purpose of the software used to manage and administer the system. Each module includes an assessment designed to test learning.

AUDIENCE

All staff who require an overview of the DIMETRA IP system functionality and features.

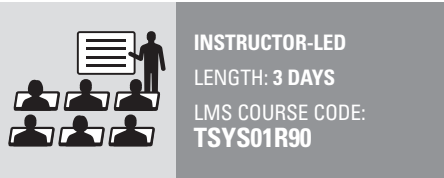
COURSE OBJECTIVES

After completing this course, the student will be able to:

- Describe Basic Radio concepts.
- Describe DIMETRA IP benefits.
- Describe DIMETRA IP D9.0 features and their benefits.
- Describe DIMETRA IP D9.0 Single Zone system components and their functionality.
- Describe the purpose and function of DIMETRA IP D9.0 Network Management applications.
- Describe DIMETRA IP D9.0 Multi-Zone system components and their functionality.
- Describe how different types of calls are processed through a DIMETRA IP D9.0 system.

REQUISITE KNOWLEDGE

None



DIMETRA IP D9.0 CONFIGURATION & ADMINISTRATION WORKSHOP

COURSE OVERVIEW

During this workshop delegates will use configuration and administration applications to manage a DIMETRA IP R9.0 system as they would on a daily basis. The delegates will perform configuration set up procedures for the more popular features and functions as well as common administration tasks, based on real business scenarios.

AUDIENCE

System managers responsible for configuration and administration of a DIMETRA IP R9.0 system

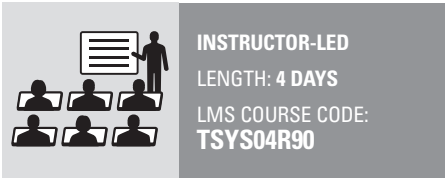
COURSE OBJECTIVES

After completing this course, the student will be able to:

- Describe the purpose of Configuration Management and Server Administration within your DIMETRA IP R9.0 System
- Define tools used to perform Configuration Management
- Perform system user and infrastructure configuration procedures
- Perform basic System Security Management procedures
- Define Applications used to perform Network Management Server and Database Administration tasks
- Explain the importance of daily operational tasks
- Perform daily operational tasks

REQUISITE KNOWLEDGE

- DIMETRA IP D9.0 System Overview course (TSYS01R90).



DIMETRA IP R8.2 CONFIGURATION & ADMINISTRATION

COURSE OVERVIEW

During this workshop delegates will use configuration and administration applications to manage a DIMETRA IP R8.2 system as they would on a daily basis. The delegates will perform configuration set up procedures for the more popular features and functions as well as common administration tasks, based on real business scenarios.

AUDIENCE

System managers responsible for configuration and administration of a DIMETRA IP R8.2 system

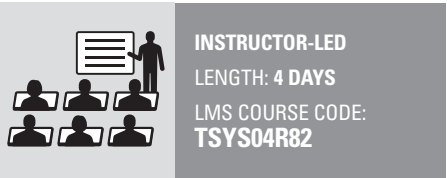
COURSE OBJECTIVES

After completing this course, the student will be able to:

- Describe the purpose of Configuration Management and Server Administration within your DIMETRA IP R8.2 System
- Define tools used to perform Configuration Management
- Perform system user and infrastructure configuration procedures
- Perform basic System Security Management procedures
- Define Applications used to perform Network Management Server and Database Administration tasks
- Explain the importance of daily operational tasks
- Perform daily operational tasks

REQUISITE KNOWLEDGE

- DIMETRA IP R8.2 System Overview course (TSYS01R82).



 [CLICK HERE TO VIEW THE SCHEDULE](#)

TETRA SYSTEMS

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DIMETRA IP R8.2 FAULT MANAGEMENT

COURSE OVERVIEW

The workshop will allow delegates to use applications to identify faults on systems components using a live DIMETRA IP R8.2 system and within the context of business scenarios.

AUDIENCE


System operations staff and field engineers who perform fault management tasks on a DIMETRA IP R8.2 system.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Define the role of Fault Management within Network Management
 - Define the role of each of the applications used within Fault Management
 - Utilise the Unified Event Manger-UEM application to assist Fault Management within the DIMETRA IP system
 - Use the TNCT to assist Fault Management
 - Use the Zone Configuration Manager application to perform diagnostic functions within the DIMETRA IP system
 - Use the Zone Watch application to assist Fault Management within the DIMETRA IP system
 - Identify file backup procedures.

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- DIMETRA IP R8.2 System Overview course (TSYS01R82).



INSTRUCTOR-LED
LENGTH: 3 DAYS
LMS COURSE CODE:
TSYS06R82

DIMETRA IP D9.0 FAULT MANAGEMENT WORKSHOP

COURSE OVERVIEW

The workshop will allow delegates to use applications to identify faults on systems components using a live DIMETRA IP R9.0 system and within the context of business scenarios.

AUDIENCE


System operations staff and field engineers who perform fault management tasks on a DIMETRA IP R9.0 system.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Define the role of Fault Management within Network Management
 - Define the role of each of the applications used within Fault Management
 - Utilize the Unified Event Manger-UEM application to assist Fault Management within the DIMETRA IP system
 - Use the TNCT to assist Fault Management
 - Use the Zone Configuration Manager application to perform diagnostic functions within the DIMETRA IP system
 - Use the Zone Watch application to assist Fault Management within the DIMETRA IP system
 - Identify file backup procedures.

REQUISITE KNOWLEDGE

- DIMETRA IP R9.0 System Overview course (TSYS01R90).



INSTRUCTOR-LED
LENGTH: 3 DAYS
LMS COURSE CODE:
TSYS06R90

DIMETRA IP D9.0 PERFORMANCE MANAGEMENT WORKSHOP

COURSE OVERVIEW

The workshop will allow delegates to use applications to identify faults on systems components using a live DIMETRA IP R9.0 system and within the context of business scenarios.

AUDIENCE


System operations staff and field engineers who perform fault management tasks on a DIMETRA IP R9.0 system.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Define the role of Fault Management within Network Management
 - Define the role of each of the applications used within Fault Management
 - Utilize the Unified Event Manger-UEM application to assist Fault Management within the DIMETRA IP system
 - Use the TNCT to assist Fault Management
 - Use the Zone Configuration Manager application to perform diagnostic functions within the DIMETRA IP system
 - Use the Zone Watch application to assist Fault Management within the DIMETRA IP system
 - Identify file backup procedures.

REQUISITE KNOWLEDGE

- DIMETRA IP R9.0 System Overview course (TSYS01R90).



INSTRUCTOR-LED
LENGTH: 3 DAYS
LMS COURSE CODE:
TSYS08R90

TETRA SYSTEMS

For information on prerequisites and to register for courses visit the LMS at: LEARNING.MOTOROLASOLUTIONS.COM

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

DIMETRA IP D9.0 TROUBLESHOOTING AND MAINTENANCE WORKSHOP

COURSE OVERVIEW

During this workshop delegates will troubleshoot and maintain a live DIMETRA IP system using business scenarios, troubleshooting procedures and diagnostic applications. Delegates will also perform complex FRU/FRE procedures to resolve hardware faults.

AUDIENCE


System and Field Engineers who troubleshoot and maintain a DIMETRA IP D9.0 system.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe troubleshooting model process, system support tools and technical support services provided by Motorola Solutions.
 - Describe the DIMETRA IP system architecture.
 - Perform troubleshooting procedures using system troubleshooting tools
 - Perform recommended routine maintenance procedures for a DIMETRA IP system.
 - Perform replacement procedures and reconfigure faulty Field Replaceable Units (FRUs) and Field Replaceable Equipment/ Entities (FREs) within a DIMETRA IP system.
 - Perform verification procedures on FRU/FRE replacement.

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- DIMETRA IP D9.0 System Overview course (TSYS01R90).
 - DIMETRA IP D9.0 Fault Management Workshop (TSYS06R90).



INSTRUCTOR-LED
LENGTH: 5 DAYS
LMS COURSE CODE:
TSYS10R90

DIMETRA IP D9.0 AIR INTERFACE ENCRYPTION, AUTHENTICATION AND PROVISIONING

COURSE OVERVIEW

During this workshop, students will perform key management tasks on a live DIMETRA IP D9.0 system. Students will perform authentication and provisioning procedures for the daily administration of user authentication and provisioning based on real business scenarios.

AUDIENCE


System Operators and Managers responsible for the provisioning and management of key authentication in a DIMETRA IP R9.0 System.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe how Air Interface Encryption and Authentication work within the DIMETRA IP System.
 - Describe the hardware components used in the Encryption and Authentication Process.
 - Describe distribution, storage, key updates and key management of Air Interface Encryption and Authentication keys.
 - Perform Encryption Key management procedures using the Enhanced AuC, PrC, and KVL system components.

REQUISITE KNOWLEDGE

- DIMETRA IP D9.0 System Overview course (TSYS01R90).



INSTRUCTOR-LED
LENGTH: 3 DAYS
LMS COURSE CODE:
TSYS12R90

DIMETRA IP D9.0 SECURE COMMUNICATION COURSE

COURSE OVERVIEW

During the workshop delegates will perform key management, administrative and maintenance tasks on a live DIMETRA IP R9.0 system. The workshop is divided into five modules and real business scenarios will allow delegates to perform key management, key transference, maintenance and troubleshooting procedures on the Key Management Facility (KMF) server and client.

AUDIENCE


System Operators, Managers and Field Technicians responsible for the management and maintenance of secure end-to-end communications in a DIMETRA IP R9.0 system.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe the theory of DIMETRA Secure Communications Operation.
 - Carry out KMF Administration.
 - Utilize the E2E KVL.
 - Perform KMF OTAK/OTek Management Activities and Procedures.
 - Administer the KMF Server.
 - Setup an MCC7500S Secure Console.

REQUISITE KNOWLEDGE

- DIMETRA IP D9.0 System Overview course (TSYS01R90).



INSTRUCTOR-LED
LENGTH: 3 DAYS
LMS COURSE CODE:
TSYS16R90

TETRA SYSTEMS

For information on prerequisites and to register for courses visit the LMS at: [LEARNING.MOTOROLASOLUTIONS.COM](#)

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

DIMETRA IP D9.0
NETWORK SECURITY

COURSE OVERVIEW

The workshop is designed to give an overview of the elements of the DIMETRA IP network security solution. The generic threat to network security will be discussed. The course is divided into six modules during which delegates will perform basic procedures using network security software elements.

AUDIENCE


System Operators, Managers, and Field Technicians responsible for the management and maintenance of Network Security in a DIMETRA IP R9.0 system.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe the Generic Threats to Network Security
 - Describe the DIMETRA AntiVirus protection
 - Describe the DIMETRA Authentication Management
 - Describe and manage DIMETRA IP firewall protection

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- DIMETRA IP R9.0 System Overview (TSYS01R90)



INSTRUCTOR-LED
LENGTH: **3 DAYS**
LMS COURSE CODE:
TSYS17R90

TETRA SYSTEMS

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DIMETRA X CORE D9.0

DIMETRA X CORE D9.0 SYSTEM
OVERVIEW

COURSE OVERVIEW

This course provides an overview of the features and functions of a DIMETRA X Core D9.0 system. The course is divided into eight modules and includes descriptions of the various call types and system hardware functionality. An application overview describes the purpose of the software used to manage and administer the system. Each module includes an assessment designed to test learning.

AUDIENCE


All staff who require an overview of the DIMETRA X Core system functionality and features.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe Basic Radio concepts.
 - Describe DIMETRA X Core benefits.
 - Describe DIMETRA X Core D9.0 features and their benefits.
 - Describe DIMETRA X Core D9.0 Single Zone system components and their functionality.
 - Describe the purpose and function of DIMETRA X Core D9.0 Network Management applications.
 - Describe DIMETRA X Core D9.0 Multi-Zone system components and their functionality.
 - Describe DIMETRA X Core D9.0 Inter-System Interface functionality.
 - Describe how different types of calls are processed through a DIMETRA X Core D9.0 system.

REQUISITE KNOWLEDGE

None



INSTRUCTOR-LED
LENGTH: **3 DAYS**
LMS COURSE CODE:
DMT1088

DIMETRA X CORE D9.0
CONFIGURATION AND
ADMINISTRATION

COURSE OVERVIEW

During this workshop delegates will use configuration and administration applications to manage a DIMETRA X Core D9.0 system as they would on a daily basis. The delegates will perform configuration set up procedures for the more popular features and functions as well as common administration tasks, based on real business scenarios.

AUDIENCE


System managers responsible for configuration and administration of a DIMETRA X Core D9.0 system

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe the purpose of Configuration Management and Server Administration within your DIMETRA X Core D9.0 System.
 - Describe fleetmapping and home zone map function.
 - Perform configuration procedures using UCM.
 - Perform configuration procedures using ZCM.
 - Perform configuration procedures using RCM.
 - Perform Network Management Server Administration tasks.
 - Explain the importance of daily operational tasks.
 - Perform server database administration tasks.

REQUISITE KNOWLEDGE

- DIMETRA X Core D9.0 System Overview course (DMT1088)



INSTRUCTOR-LED
LENGTH: **4 DAYS**
LMS COURSE CODE:
DMT1089

DIMETRA X CORE D9.0 FAULT
MANAGEMENT

COURSE OVERVIEW

The workshop will allow delegates to use applications to identify faults on systems components using a live DIMETRA X Core D9.0 system and within the context of business scenarios.

AUDIENCE

System operations staff and field engineers who perform fault management tasks on a DIMETRA IP D9.0 system.

COURSE OBJECTIVES


- After completing this course, the student will be able to:
- Define the role of Fault Management within Network Management
 - Define the role of each of the applications used within Fault Management
 - Utilize the Unified Event Manger-UEM application to assist Fault Management within the DIMETRA X Core system
 - Use the Transport Network Device Manager (TNDM) to assist Fault Management
 - Use the Zone Configuration Manager application to perform diagnostic functions within the DIMETRA X Core system
 - Use the Zone Watch application to assist Fault Management within the DIMETRA X Core system
 - Identify file backup procedures.

REQUISITE KNOWLEDGE


- DIMETRA X Core D9.0 System Overview course



INSTRUCTOR-LED
LENGTH: **3 DAYS**
LMS COURSE CODE:
DMT1090



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DIMETRA X CORE D9.0
PERFORMANCE MANAGEMENT

COURSE OVERVIEW

During this workshop delegates will use applications on a live DIMETRA X Core D9.0 system using business scenarios. Using these applications delegates will learn how to interpret system and user performance based on call traffic and device statistics.

AUDIENCE


System operators and managers who monitor and collect system statistics on a DIMETRA X Core D9.0 system.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe the factors that affect system performance.
 - Describe the Performance Management Analysis process.
 - List the Performance Management applications used in a DIMETRA system.
 - Describe the purpose of system reports, system usage applications and device statistics in Performance Management activities.
 - Access and navigate DIMETRA Performance Management applications to monitor system activity and generate system reports.

REQUISITE KNOWLEDGE

- DIMETRA X Core D9.0 System Overview course (DMT1088)



INSTRUCTOR-LED

LENGTH: 3 DAYS

LMS COURSE CODE:
DMT1091

DIMETRA X CORE D9.0
TROUBLESHOOTING AND
MAINTENANCE

COURSE OVERVIEW

During this workshop delegates will troubleshoot and maintain a live DIMETRA X Core system using business scenarios, troubleshooting procedures and diagnostic applications. Delegates will also perform complex FRU/FRE procedures to resolve hardware faults.

AUDIENCE


System and Field Engineers who troubleshoot and maintain a DIMETRA X Core D9.0 system.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe troubleshooting model process, system support tools and technical support services provided by Motorola Solutions.
 - Describe the DIMETRA X Core system architecture.
 - Perform troubleshooting procedures using system troubleshooting tools.
 - Perform recommended routine maintenance procedures for a DIMETRA X Core system.
 - Perform replacement procedures and reconfigure faulty Field Replaceable Units (FRUs) and Field Replaceable Equipment/Entities (FREs) within a DIMETRA X Core system.
 - Perform verification procedures on FRU/FRE replacement.

REQUISITE KNOWLEDGE

- DIMETRA X Core System Overview course (DMT1088)
- DIMETRA X Core Fault Management Workshop (DMT1090)



INSTRUCTOR-LED

LENGTH: 5 DAYS

LMS COURSE CODE:
DMT1092



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TETRA SYSTEMS

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DIMETRA IP COMPACT R8.2

DESIGN A DIMETRA IP COMPACT
SYSTEM

COURSE OVERVIEW

This course provides best practices in the design of DIMETRA IP Compact System. It covers all areas from the initial gathering of customer requirements, selecting the most appropriate hardware and features, through to final technical review and customer acceptance testing. The course is highly practical and covers the use of system design tools, such as the Pricebook Configuration tool, Network Configuration Tool Express and Terminal Pricebook Configuration Tool to produce a final design and cost breakdown of a customer system

AUDIENCE

Technical System Managers responsible for setting-up, configuring and administering a DIMETRA IP Compact System.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Gather customer system requirements using the 5C question model
 - Generate preliminary design using Motorola system design tools
 - Select DIPC hardware and features to meet customer needs
 - Create a detailed design document for customer approval using Motorola system design tools
 - Describe requirements for RF and control site selection
 - Develop final system documentation based on customer updates
 - Describe installation planning requirements

REQUISITE KNOWLEDGE

- AEE1300 Basic RF Fundamentals
- AEE1301 Basic Networking Fundamentals
- AAE1403 DIMETRA IP Subscriber Portfolio Overview
- AAE1404 DIMETRA IP System Portfolio Overview
- DMT1018.00E Tetra Accessories Overview



INSTRUCTOR-LED

LENGTH: 3 DAYS

LMS COURSE CODE:
AEL2302

SETTING UP AND MANAGING
YOUR DIMETRA IP COMPACT
SYSTEM

COURSE OVERVIEW

The workshop will provide an overview on how to set-up and run a DIMETRA IP Compact/ Scalable IP system. The course will provide a system overview of the components and applications that make up the system as well as hands-on practicals that will allow delegates to perform configuration set-up procedures for common features and functions as well as common administration tasks.

AUDIENCE


System Managers/Staff responsible for setting-up, configuring and administering a DIMETRA IP Compact /Scalable IP System, MTS and MCC7500 equipment.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Setup a DIMETRA IP Compact/Scalable IP System.
 - Configure a DIMETRA IP Compact/Scalable IP System for use using NM applications and procedures.
 - Carry out MTS configuration and verification procedures using Motorola BTS Service Software application.
 - Setup and configure a MCC 7500 dispatch subsystem for use within the DIMETRA IP Compact/Scalable IP system.
 - Carry out system backup and restoration procedures using the DIMETRA Enhanced Software Update application and manual techniques.

REQUISITE KNOWLEDGE

- Network Management Overview (DCOMP01R82)



INSTRUCTOR-LED

LENGTH: 5 DAYS

LMS COURSE CODE:
DCOMP04R82

TROUBLESHOOTING AND
MAINTENANCE OF YOUR DIMETRA
IP COMPACT SYSTEM

COURSE OVERVIEW

The workshop will allow delegates an introduction into troubleshooting and maintaining a live DIMETRA IP Compact system. Delegates will complete a series of business scenario task sheets, utilising a troubleshooting methodology, diagnostics applications and completing FRU/FRE procedures to resolve issue.

AUDIENCE


Technical System Managers and Network Technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe troubleshooting model process, system support tools and technical support services provided by Motorola Solutions
 - Describe the DIMETRA system architecture
 - Perform troubleshooting procedures using system troubleshooting tools
 - Perform recommended routine maintenance procedures for a DIMETRA IP System
 - Perform replacement procedures and reconfigure faulty Field Replaceable Units (FRUs) and Field Replaceable Equipment/ Entities (FREs) within a DIMETRA IP System.
 - Perform verification procedures on FRU/FRE replacement.

REQUISITE KNOWLEDGE


- RF background knowledge
- Network Management Overview (DCOMP01R82)
- Setting up and Managing your DIMETRA IP Compact (DCOMP04R82)



INSTRUCTOR-LED

LENGTH: 3 DAYS

LMS COURSE CODE:
DCOMP05R82



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TETRA SYSTEMS

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TETRA TERMINAL OPERATOR, PROGRAMMING AND MAINTENANCE

COURSE OVERVIEW

This practical course will provide assistance to TETRA radio users, diagnose radio problems both locally and remotely. Program the radio for end users operations and provide first line maintenance for suspected faulty radios.

AUDIENCE


Technicians and personnel, who will be involved in programming and maintaining to level 1.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Locate and use all MTP6650 and MTM5400 controls.
 - Execute trunked and direct mode calls using the MTP6650 and MTM5400 radios.
 - Carry out radio troubleshooting using built-in diagnostics.
 - Describe the function of Motorola CPS Plus software.
 - Create a user codeplug and program the codeplug into an MTP6650 and MTM5400 radio.
 - Carry out software troubleshooting using CPS Plus.

REQUISITE KNOWLEDGE

None



INSTRUCTOR-LED
LENGTH: 1 DAY
LMS COURSE CODE:
DMT1107



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TETRA SYSTEMS

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For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

DIMETRA IP MICRO

DESIGNING A DIMETRA IP MICRO SYSTEM

COURSE OVERVIEW

This course provides best practices in the design of DIMETRA IP Micro systems. It covers all areas from the initial gathering of customer requirements, selecting the most appropriate hardware and features, through to final technical review and customer acceptance testing. The course is highly practical and covers the use of system design tools, such as the Micro Pricebook Configuration tool and Terminal Pricebook Configuration Tool to produce a final design and cost breakdown of a customer system

AUDIENCE


Technical System Managers

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Gather customer system requirements using the 5C question model
 - Generate preliminary design using Motorola system design tools
 - Select DIPM hardware and features to meet customer needs
 - Create a detailed design document for customer approval using Motorola system design tools
 - Describe requirements for RF and control site selection
 - Develop final system documentation based on customer updates
 - Describe installation planning requirements

REQUISITE KNOWLEDGE

- AAE1303 Radio 101 Fundamentals
- AEE1300 Basic RF Fundamentals
- AEE1301 Basic Networking Fundamentals
- AAE1403 DIMETRA IP Subscriber Portfolio Overview
- AAE1404 DIMETRA IP System Portfolio Overview



INSTRUCTOR-LED
LENGTH: 3 DAYS
LMS COURSE CODE:
AEL2303

DEPLOYING AND MANAGING A DIMETRA IP MICRO SYSTEM

COURSE OVERVIEW

The workshop will provide an overview on how to set-up and run a DIMETRA IP Micro system. The course will provide a system overview of the components and applications that make up the system as well as hands-on practicals that will allow delegates to perform typical configuration set-up procedures as well as common administration tasks.

AUDIENCE


Personnel responsible for setting-up, configuring and administering a DIMETRA IP Micro system.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe the procedure for a DIMETRA IP Micro System installation.
 - Demonstrate the DIMETRA IP Micro System operation procedures.
 - Demonstrate the DIMETRA IP Micro System administration procedures.
 - Demonstrate the DIMETRA IP Micro System maintenance procedures.
 - Describe Network Planning in overview.

REQUISITE KNOWLEDGE

- IP background, RF Fundamentals, Design a DIPM System one



INSTRUCTOR-LED
LENGTH: 2 DAYS
LMS COURSE CODE:
DMT3002



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TETRA SYSTEMS

For information on prerequisites and to register for courses visit the LMS at: [LEARNING.MOTOROLASOLUTIONS.COM](#)

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

ADDITIONAL DIMETRA TRAINING

DIMETRA IP SYSTEM OVERVIEW

COURSE OVERVIEW

After a brief review of Professional Mobile Radio (PMR) and Terrestrial Trunked Radio (TETRA) technologies, this course will focus on introducing Motorola Solutions’ DIMETRA IP Portfolio.


AUDIENCE

Personnel requiring a generic introduction to DIMETRA IP

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Describe Professional Mobile Radio (PMR) properties and applications.
- Describe the TETRA standard, system structure, modes of operation and TETRA services.



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REQUISITE KNOWLEDGE

None



ONLINE, SELF-PACED
LENGTH: 2 HOURS
LMS COURSE CODE:
AAE1404

TETRA PORTFOLIO OVERVIEW

COURSE OVERVIEW

This course provides training to TETRA portfolio overview. Topics in the course give the student information on the Dimetra IP portfolio overview, TETRA radio portfolio overview, TETRA accessories portfolio overview, WAVE 5000 and their features; Customer profiles and markets; and resources to Partner Empower certification.

AUDIENCE

Professionals who wish to gain an overview of the portfolio.

COURSE OBJECTIVES

By the end of this training course, you will be able to:

- Describe the TETRA infrastructure, radios, accessories portfolio and their features.
- Describe WAVE 5000 portfolio.
- Identify vertical markets for sales of TETRA solutions.
- Provide examples of use cases for the TETRA portfolio.
- Locate available resources for Partner Empower certification.

REQUISITE KNOWLEDGE

None



ONLINE, SELF-PACED
LENGTH: 1 HOUR
LMS COURSE CODE:
DMT0020

NETWORK MANAGEMENT OVERVIEW

COURSE OVERVIEW

This e-Learning course provides an overview of the functions of Configuration and Administration Management, Fault Management and Performance Management. The applications used in each functional area are demonstrated based on business scenarios.

AUDIENCE

System Managers, Operators and Engineers needing an overview of the Network Management Applications used for FCAPS in a Dimetra IP R8.2 system.

COURSE OBJECTIVES

After completing this training course you will be able to:

- Identify the role and purpose of Network Management (NM) within a Dimetra IP System.
- Define the FCAPS structure, and how Motorola Dimetra IP applications are associated with it.
- Identify common navigation features of NM applications within the Dimetra IP system and how to access the applications.
- Define the role of Configuration, Fault and Performance within NM.
- Define key NM application features and tools. ı Identify tasks related to Configuration, Fault and Performance using the relevant NM applications.

REQUISITE KNOWLEDGE

None



ONLINE, SELF-PACED
LENGTH: 1.5 HOURS
LMS COURSE CODE:
DCOMP01R82

TETRA SYSTEMS

For information on prerequisites and to register for courses visit the LMS at: [LEARNING.MOTOROLASOLUTIONS.COM](#)

DIMETRA APPLIED NETWORKING

COURSE OVERVIEW

This course provides engineers and technicians with the necessary networking information required for the network components applied in the DIMETRA systems. The course includes overview of the basic networking concepts, network configuration overview of the transport network components and information assurance applied in the DIMETRA systems.

AUDIENCE

Technical System Managers and Network Technicians


COURSE OBJECTIVES

After completing this course, the student will be able to:

- Describe basic IP network hardware and protocols.
- Analyze basic IP network connectivity and addressing.
- Describe DIMETRA Network Transport Subsystem.
- Operate DIMETRA Transport Network Device Management application.
- Describe DIMETRA Master Site VLAN/VRRP Operation.
- Describe Site link, console site link and Inter-zone link connectivity.
- Describe Site link, console site link and Inter-zone link connectivity.
- Describe DIMETRA applied networking in a call processing .
- Describe DIMETRA Information Assurance.
- Describe the Customer Network Integration interfaces
- Describe DIMETRA Data Subsystem

REQUISITE KNOWLEDGE

None



INSTRUCTOR-LED
LENGTH: 5 DAYS
LMS COURSE CODE:
DMT1108

DIMETRA IP D8.2 DISPATCH COMMUNICATIONS SERVER WORKSHOP

COURSE OVERVIEW

This workshop provides an overview of the DIMETRA Dispatch Communication Server as well as hands on activities in terms of configuration, administration, troubleshooting and maintenance aspects of the DCS server and DCS clients.

AUDIENCE

Field and system engineers who support DCS solution.


COURSE OBJECTIVES

After completing this course, the student will be able to:

- Describe DCS functionality, topology, components and client connectivity.
- Describe DCS solution system limits, throughput and performance.
- Describe how DCS solution is incorporated in DIMETRA call processing.
- Perform configuration of DCS solution components.
- Administer and maintain the DCS solution.
- Perform diagnostic and troubleshooting activities for the DCS solution.
- Perform restoration procedures for DCS solution components in the event of failure.

REQUISITE KNOWLEDGE

- DIMETRA IP R8.2 System Overview (TSYS01R82)
- DIMETRA IP R8.2 Configuration & Administration (TSYS04R82)



INSTRUCTOR-LED
LENGTH: 3 DAYS
LMS COURSE CODE:
DMT1112

MOTOMAPPING OPERATION AND ADMINISTRATION

COURSE OVERVIEW

The purpose of this course is to provide operational knowledge of the Intelligent Middleware MotoMapping solution. It captures essential navigational and procedural activities that are used for administering, managing, and utilizing MotoMapping.

AUDIENCE

Personnel responsible for administrative and operational management of Intelligent Middleware applications.


COURSE OBJECTIVES

After completing this course, the student will be able to:


- The goal of this course is to present a spectrum of actions that can be performed in MotoMapping, including preparatory tasks.

REQUISITE KNOWLEDGE

None



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INSTRUCTOR-LED
LENGTH: 1 DAY
LMS COURSE CODE:
AVL02



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TETRA SYSTEMS

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**UNS OPERATIONS AND
ADMINISTRATION R4.0**

COURSE OVERVIEW

The purpose of this course is to provide the steps to operate and maintain a customer's UNS within their Motorola system (DIMETRA IP). The course should provide system so students can have hands-on practice going through the operation, maintenance, and troubleshooting steps .

AUDIENCE


Partners/Resellers and customers who would be responsible for the operation and maintenance of a customer's UNS within their Motorola system (DIMETRA IP).

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe the Features of UNS
 - Configure a UNS system
 - Identify the UNS tools to administer the system
 - Perform routine administration
 - Perform troubleshooting

REQUISITE KNOWLEDGE

None



INSTRUCTOR-LED
LENGTH: 2 DAYS
LMS COURSE CODE:
DMT2008

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CONSOLE COURSES

DISPATCH CONSOLE PORTFOLIO

OPERATIONAL COMMAND AND CONTROL FROM
MULTIPLE POINTS, AT MULTIPLE LEVELS

MCC 7100

MCC 7500

MCC 7500e

MCD 5000

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* PLEASE NOTE:

MCC 7000 Series Dispatch Consoles Workshop (CON012) focuses on the consoles application in an M- or L-Core System.

THE LEARNING
MANAGEMENT
SYSTEM (LMS)

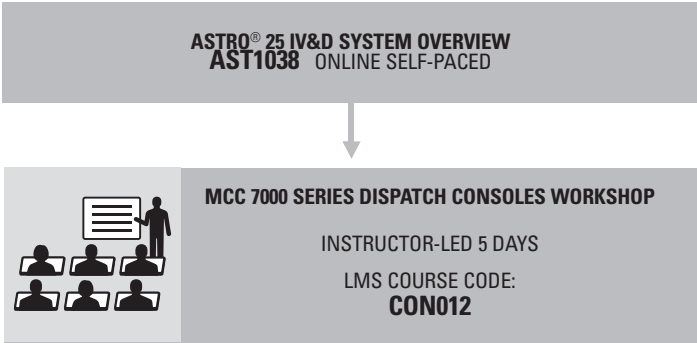
To register for a course, go to learning.motorolasolutions.com

RADIO SOLUTIONS CONSOLES

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For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

CONSOLES TECHNICAL TRAINING CURRICULUM



CURRICULUM COMPLETE

PARTICIPANT CAN MAINTAIN A MCC 7000 DISPATCH CONSOLE SITE INCLUDING: CONSOLE PC, VPM, CC GW'S AND AUX I/O SERVERS.
*PARTICIPANT PERFORMS TROUBLESHOOTING AND REPLACEMENT OF SITE DEVICES DURING COURSE.

OPTIONAL CONSOLE TRAINING

MCD 5000 TECHNICAL WORKSHOP

INSTRUCTOR-LED
3 DAYS

RDS1022

ASTRO®25 NICE LOGGER INTEGRATION

INSTRUCTOR-LED
5 DAYS

AST1002

ASTRO® 25 DOMAIN CONTROLLER ADMINISTRATION

INSTRUCTOR-LED
3 DAYS

AST2015

RADIO SOLUTIONS CONSOLES

For information on prerequisites and to register for courses visit the LMS at: [LEARNING.MOTOROLASOLUTIONS.COM](#)

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

ASTRO® 25 IV&D SYSTEM OVERVIEW

COURSE OVERVIEW

The ASTRO® 25 IV&D System Overview course will provide participants with knowledge and understanding of the ASTRO® 25 IV&D system. This course will address M, L and K Core systems. System architecture, components and features will be explained. In addition, RF and console sites and their architecture, features and components will be discussed. Finally, call processing for voice and mobile data applications will be covered, and an introduction to applications available in the ASTRO® 25 system will be provided.

AUDIENCE

Core Technicians, Site Technicians, Console Technicians, Core Managers.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Understand the general architecture of an ASTRO® 25 IV&D Radio System
 - Understand key features of available in the ASTRO® 25 IV&D Radio System
 - Understand the components of the ASTRO® 25 Zone Core
 - Understand site components in the ASTRO® 25 system
 - Understand the features,capabilities and components of the MCC7000 series dispatch consoles
 - Understand concepts of Mobility and Call Processing in the ASTRO25
 - Understand the applications for managing the ASTRO® 25 system

REQUISITE KNOWLEDGE

None

ONLINE, SELF-PACED

LENGTH: 4 HOURS

LMS COURSE CODE:
AST1038

ASTRO® 25 DOMAIN CONTROLLER ADMINISTRATION

COURSE OVERVIEW

This workshop covers the administrator and management functions in the ASTRO® 25 Domain Controller and how these functions affect both users and computers in the ASTRO® 25 system. Learning activities in this course focus on how to use the Domain Controllers to authenticate, administer, and authorize users and devices in the ASTRO® 25 System. Group Policies and Organizational Units, RADIUS, and DNS structure will be addressed during this course.

AUDIENCE

Console Technicians, System Managers

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Understand the Domain Controller server platform
 - Understand the DNS Hierarchy in the ASTRO® 25 system
 - Implement RADIUS authentication in applicable devices in an ASTRO® 25 system.
 - Use Active Directory to control users in the ASTRO® 25 system.
 - Understand Group Policy objects and how they impact users in the ASTRO® 25 Domain.

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- ASTRO® 25 IV&D System Overview (AST1038)

INSTRUCTOR-LED

LENGTH: 3 DAYS

LMS COURSE CODE:
AST2015

MCC 7000 SERIES DISPATCH CONSOLES WORKSHOP

COURSE OVERVIEW

This course familiarizes participants with installation, configuration, management and repair of MCC 7000 series dispatch consoles, Archiving Interface Servers, AUX I/O servers, and Conventional Channel Gateways. The focus is on a detailed discussion of console hardware and the installation and configuration of the MCC 7000 series consoles which consist of the MCC 7100 and MCC 7500 dispatch console.

AUDIENCE

System Administrators, Console Technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Install and configure the hardware and software components of the MCC 7000 Series Dispatch Consoles Subsystem
 - Perform MCC 7000 Series site connectivity and bandwidth management
 - Perform System Administrator functions using the MCC 7000 Series Administrator software
 - Troubleshoot installation and configuration problems for the MCC 7000 Series Dispatch Consoles

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- Bridging the Knowledge Gap (ACT100E or ACT101E)
- Networking Essentials in Communication Equipment (NST762)
- ASTRO® 25 Systems Applied Networking (NWT003)

Required:

- ASTRO® 25 IV&D System Overview (AST1038)

INSTRUCTOR-LED

LENGTH: 5 DAYS

LMS COURSE CODE:
CON012

RADIO SOLUTIONS CONSOLES

For information on prerequisites and to register for courses visit the LMS at: LEARNING.MOTOROLASOLUTIONS.COM

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

ASTRO® 25 NICE LOGGER INTEGRATION

COURSE OVERVIEW

This workshop covers the tasks and knowledge to implement a NICE logging solution in an ASTRO® 25 system. Learning activities in this course focus on both initial installation and configuration, and operation and troubleshooting the components after installation. Participants will be provided with an opportunity to demonstrate, with available lab equipment, tasks required to install and maintain the related subsystem components.

AUDIENCE

Console Technicians, System Managers

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Describe the functionality of the different components and applications required for NICE Radio logging
- Install and configure required components into an ASTRO® 25 system
- Perform administrative tasks necessary for operation of the logging solution
- Use system tools and applications to identify potential causes of failure of the logging solution

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- ASTRO® 25 IV&D System Overview (AST1038)
- MCC7000 Series Dispatch Console Workshop (CON012)

MCC7500 OPERATOR AND ADMINISTRATION

COURSE OVERVIEW

This course provides students with an introduction to the dispatch console, its basic operation and tailored job aids which will be available for assistance in operation. Through facilitation and hands-on activities, the user learns how to perform common tasks associated with the console operation.

AUDIENCE

Dispatch Console Operators, System Administrators for Dispatch Console Operators

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Identify the hardware components that make up the dispatcher position
- Describe the purpose of the Elite Dispatch application
- Identify elements that make up the menu and toolbar structure within the Elite Dispatch software
- Perform dispatcher operations:
 - Communicate with radios: transmit and receive calls within group and individual communications categories
 - Perform advanced signaling features
 - Perform basic procedures within screen configurations
 - Perform basic procedures within resource groups

REQUISITE KNOWLEDGE

None



INSTRUCTOR-LED
LENGTH: 1 DAY
LMS COURSE CODE:
DCOMP11R8

RADIO SOLUTIONS CONSOLES

For information on prerequisites and to register for courses visit the LMS at: LEARNING.MOTOROLASOLUTIONS.COM

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DIMETRA D9.0 MCC7500 OPERATOR

COURSE OVERVIEW

This course provides students with an introduction to the dispatch console, its basic operation and tailored job aids which will be available for assistance in operation. Through facilitation and hands-on activities, the user learns how to perform common tasks associated with the console operation.

AUDIENCE

Dispatch Console Operators

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Identify the hardware components that make up the dispatcher position
- Describe the purpose of the Elite Dispatch application
- Identify elements that make up the menu and toolbar structure within the Elite Dispatch software
- Perform dispatcher operations:
 - Communicate with radios: transmit and receive calls within group and individual communications categories
 - Perform advanced signaling features
 - Perform basic procedures within screen configurations
 - Perform basic procedures within resource groups

REQUISITE KNOWLEDGE

None



INSTRUCTOR-LED
LENGTH: 1 DAY
LMS COURSE CODE:
TSYS32R90

DIMETRA D9.0 MCC7500 ADMINISTRATOR

COURSE OVERVIEW

This course provides students with an introduction to the Elite Admin application. It enables system administrators to use the software to set up configurations for the Elite Dispatch desktops that organize resources to meet specific user needs. Through facilitation and hands-on activities, the user learns how the configurations created in the Elite Admin can be saved and then distributed among the Elite Dispatch desktops.

AUDIENCE

System Administrators for Dispatch Console Operators

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Identify the hardware components that make up the dispatcher position
- Describe the Purpose of the Elite Admin application
- Identify elements that make up the menu and toolbar structure within the Elite Admin software
- Perform Elite Admin Configurations

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- DIMETRA MCC 7500 Operator Course (TSYS32R90)



INSTRUCTOR-LED
LENGTH: 1 DAY
LMS COURSE CODE:
TSYS33R90

DIMETRA D9.0 MCC 7500C INSTALLATION, CONFIGURATION, TROUBLESHOOTING, AND MAINTENANCE COURSE

COURSE OVERVIEW

During this workshop students will perform installation, configuration and troubleshooting procedures relating to the MCC 7500C dispatch console on a live DIMETRA D9.0 system.

AUDIENCE

Control Room Managers, System Engineers and Network Administrators responsible for the installation, configuration and maintenance of control rooms containing dispatch consoles.

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Install and configure the hardware and software components of the MCC 7500C Dispatch Console subsystem.
- Troubleshoot installation and configuration problems for the MCC 7500C Dispatch Console.

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- DIMETRA MCC 7500 Operator Course (TSYS32R90)
- DIMETRA D9.0 MCC7500 Administrator (TSYS33R90)



INSTRUCTOR-LED
LENGTH: 3 DAYS
LMS COURSE CODE:
TSYS31R90

RADIO SOLUTIONS CONSOLES

For information on prerequisites and to register for courses visit the LMS at: [LEARNING.MOTOROLASOLUTIONS.COM](#)

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

MCD 5000 TECHNICAL WORKSHOP

COURSE OVERVIEW

This workshop supports those that install, configure, or support the MCD 5000 Deskset. This three day training course will cover installation procedures for the MCD5000 Deskset, Radio Gateway Unit (RGU), and connectivity to different station types. Configuration and programming of the MCD5000 and its supporting equipment will be covered through discussion and hands- on lab activities. Troubleshooting and maintenance techniques will be addressed to the Motorola Solutions recommended service level.

AUDIENCE


Console Technicians, System Managers

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Identify the MCD 5000 System Components and functions
 - Install MCD 5000 Deskset
 - Install Radio Gateway Units
 - Configure MCD 5000 subcomponents
 - Troubleshoot the MCD 5000 System to Motorola Solutions recommended service levels
 - Configure MCD 5000 with the Operations and Management Center (OMC), as applicable.
 - Use the Administrator Control Panel (ACP) to configure an MCD 5000 System with OMC.
 - Describe the function of the MCD 5000 Deskset
 - Describe all tasks on the MCD 5000 Deskset
 - Discuss MCD 5000 Deskset Basic Operations

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- Communication Systems Concepts (NST021)



INSTRUCTOR-LED
LENGTH: **3 DAYS**
LMS COURSE CODE:
RDS1022

MCC7500 OPERATOR AND ADMINISTRATION

COURSE OVERVIEW

This course provides students with an introduction to the dispatch console, its basic operation and tailored job aids which will be available for assistance in operation. Through facilitation and hands-on activities, the user learns how to perform common tasks associated with the console operation.

AUDIENCE


Dispatch Console Operators, System Administrators for Dispatch Console Operators

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Identify the hardware components that make up the dispatcher position
 - Describe the purpose of the Elite Dispatch application
 - Identify elements that make up the menu and toolbar structure within the Elite Dispatch software
 - Perform dispatcher operations:
 - Communicate with radios: transmit and receive calls within group and individual communications categories
 - Perform advanced signaling features
 - Perform basic procedures within screen configurations
 - Perform basic procedures within resource groups

REQUISITE KNOWLEDGE

None



INSTRUCTOR-LED
LENGTH: **1 DAY**
LMS COURSE CODE:
DCOMP11R8

DIMETRA D9.0 MCC7500 OPERATOR

COURSE OVERVIEW

This course provides students with an introduction to the dispatch console, its basic operation and tailored job aids which will be available for assistance in operation. Through facilitation and hands-on activities, the user learns how to perform common tasks associated with the console operation.

AUDIENCE


Dispatch Console Operators.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Identify the hardware components that make up the dispatcher position
 - Describe the purpose of the Elite Dispatch application
 - Identify elements that make up the menu and toolbar structure within the Elite Dispatch software
 - Perform dispatcher operations:
 - Communicate with radios: transmit and receive calls within group and individual communications categories
 - Perform advanced signaling features
 - Perform basic procedures within screen configurations
 - Perform basic procedures within resource group

REQUISITE KNOWLEDGE

None



INSTRUCTOR-LED
LENGTH: **1 DAY**
LMS COURSE CODE:
TSYS32R90

RADIO SOLUTIONS CONSOLES

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For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

DIMETRA D9.0 MCC7500 ADMINISTRATOR

COURSE OVERVIEW

This course provides students with an introduction to the Elite Admin application. It enables system administrators to use the software to set up configurations for the Elite Dispatch desktops that organize resources to meet specific user needs. Through facilitation and hands-on activities, the user learns how the configurations created in the Elite Admin can be saved and then distributed among the Elite Dispatch desktops.

AUDIENCE


System Administrators for Dispatch Console Operators.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Identify the hardware components that make up the dispatcher position
 - Describe the Purpose of the Elite Admin application
 - Identify elements that make up the menu and toolbar structure within the Elite Admin software
 - Perform Elite Admin Configurations

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- DIMETRA MCC 7500 Operator Course



INSTRUCTOR-LED
LENGTH: **1 DAY**
LMS COURSE CODE:
TSYS33R90

DIMETRA D9.0 MCC7500 TROUBLESHOOTING AND MAINTENANCE

COURSE OVERVIEW

During this workshop students will perform installation, configuration and troubleshooting procedures relating to the MCC 7500C dispatch console on a live DIMETRA D9.0 system.

AUDIENCE


Control Room Managers, System Engineers and Network Administrators responsible for the installation, configuration and maintenance of control rooms containing MCC 7500C dispatch consoles in a DIMETRA D9.0 system.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Install and configure the hardware and software components of the MCC 7500C Dispatch Console subsystem.
 - Troubleshoot installation and configuration problems for the MCC 7500C Dispatch Console.

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- System Overview course



INSTRUCTOR-LED
LENGTH: **3 DAYS**
LMS COURSE CODE:
TSYS31R90



SUBSCRIBER COURSES

CPS PROGRAMMING AND TEMPLATE BUILDING (ADT001V)	67
XTS/XTL TECHNICAL SUBSCRIBER ACADEMY (ADST005)	67
APX™ CPS PROGRAMMING AND TEMPLATE BUILDING (APX7001V)	68
APX™ TECHNICAL SUBSCRIBER ACADEMY (APX010)	68
APX™ RADIO MANAGEMENT WORKSHOP (RDS2017)	69
TETRA SUBSCRIBER END-USER OPERATOR COURSES	70
TETRA SUBSCRIBER SERVICE TRAINING	71
MOTOTRBO SUBSCRIBER AND REPEATER TECHNICAL SERVICE ACADEMY (TBO300)	71
SI 500 RADIO MANAGEMENT R2.X (PSA1053)	72
PUBLIC SAFETY LTE LEX L10I MISSION CRITICAL HANDHELD OVERVIEW (LTE1024)	72
PUBLIC SAFETY LTE VEHICULAR SUBSCRIBER MODEM WORKSHOP (LTE1023)	72

THE APX RADIO TECHNICAL ACADEMY AND THE XTS/XTL RADIO TECHNICAL ACADEMY

These “academy” style technical training courses are designed to provide technicians handling install, configuration, maintenance and troubleshooting support on APX or XTS/XTL subscribers, with a broader and deeper view of the APX radio and XTS/XTL radio. In addition to focusing on the capability, function and features of the APX and XTS/XTL radios as well as the detailed theory of operation of those radios, these academies will continue to focus on the correct procedures used to complete radio performance checks, radio alignment, maintenance and troubleshooting. They will also highlight other useful skills. These radio academies will include lecture and lab work on topics such as: Radio Flashing, Encryption (including configuring radios for OTAR), Programming Over P25 (POP 25), Advanced System Key Management, Vacuum and Submersibility testing, Mobile radio installation, Multiple Control Head configuration and many other special setup or configuration modes.

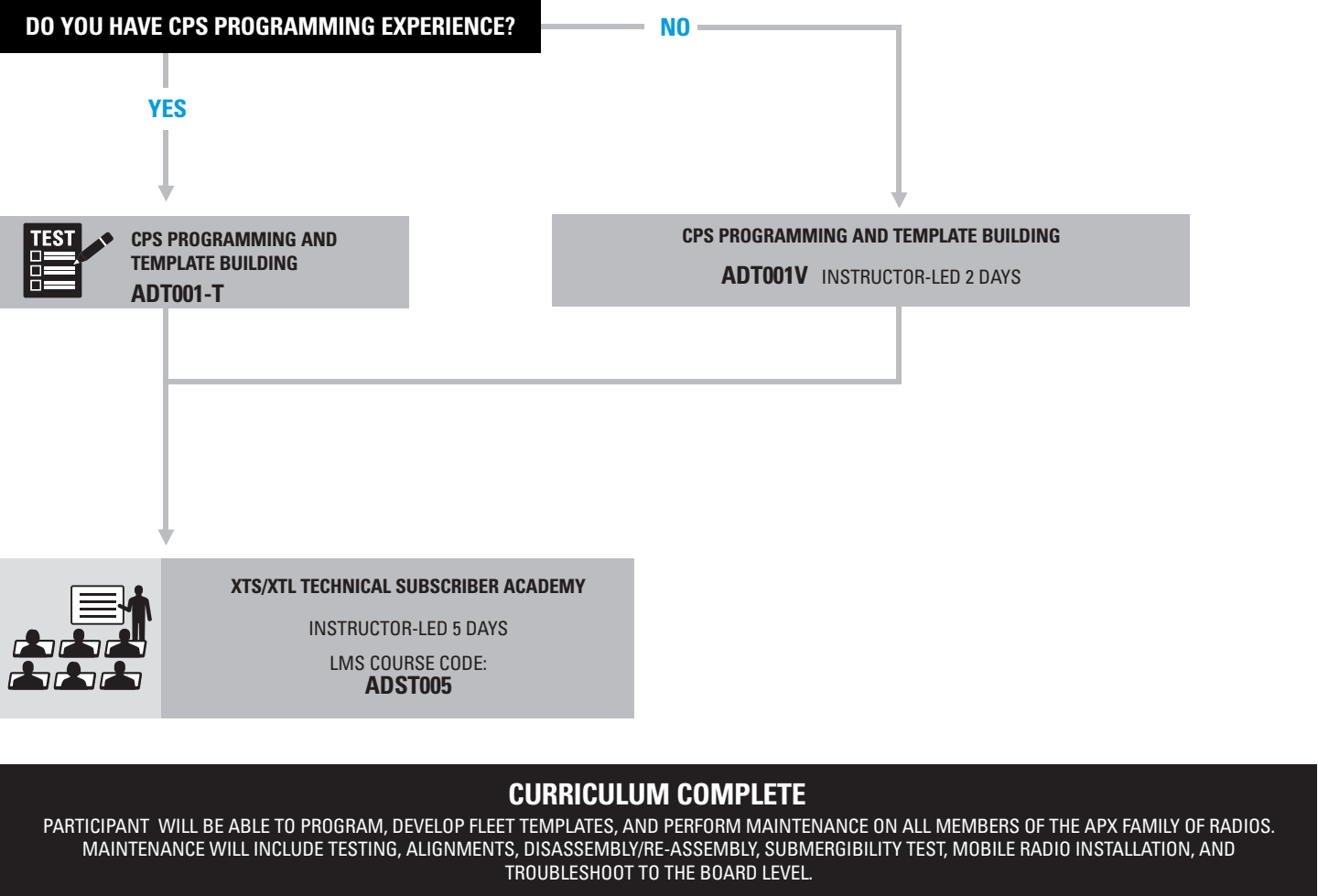
NOTE: As new APX models are released, they will be addressed during the APX Academy training. This approach provides technicians the expertise they need to work on the whole family of radios.

RADIO SOLUTIONS SUBSCRIBERS

For information on prerequisites and to register for courses visit the LMS at: [LEARNING.MOTOROLASOLUTIONS.COM](#)

For general information contact the Latin America Education Services help desk at: [training.LACR@motorolasolutions.com](#)

XTS/XTL SUBSCRIBER FAMILY

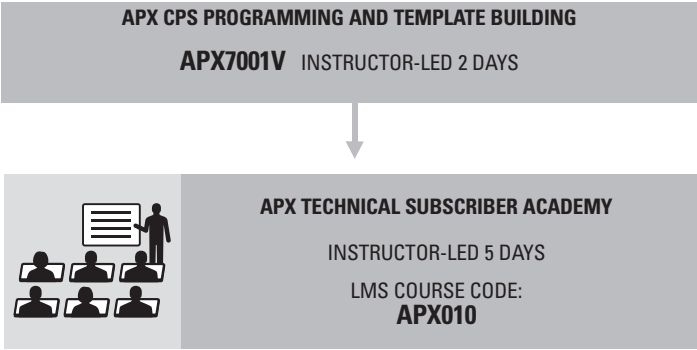


RADIO SOLUTIONS SUBSCRIBERS

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APX SUBSCRIBER FAMILY



CURRICULUM COMPLETE

PARTICIPANT SHOULD BE ABLE TO PROGRAM, DEVELOP FLEET TEMPLATES, AND PERFORM MAINTENANCE ON ALL MEMBERS OF THE XTS/XTL FAMILY OF RADIOS. MAINTENANCE WILL INCLUDE TESTING, ALIGNMENTS, DISASSEMBLY/RE-ASSEMBLY, SUBMURGIBILITY TEST, MOBILE RADIO INSTALLATION, AND TROUBLESHOOT TO THE BOARD LEVEL.

RADIO SOLUTIONS SUBSCRIBERS

For information on prerequisites and to register for courses visit the LMS at: LEARNING.MOTOROLASOLUTIONS.COM

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CPS PROGRAMMING AND TEMPLATE BUILDING

COURSE OVERVIEW

This course provides communications management personnel and technicians with the knowledge and tools needed to program the radio units in the most efficient way depending on the system, features and options they require. The parameters and exercises shown in the class apply to a wide number of portable and mobile radios, including XTS 5000, XTS 3000, XTS 2500, XTS 1500, XTL 5000, XTL 2500, XTL 1500, MTS 2000, MCS 2000, the SPECTRA family, and the Professional Series.

AUDIENCE

Radio Technicians, System Managers

COURSE OBJECTIVES


After completing this course, the student will be able to:

- Program the basic parameters of any radio using the Customer Programming Software (CPS)
- Program the specific parameters of any radio related with the system where the user is going to work: conventional, single site trunking, Simulcast, AMSS, SmartZone or ASTRO® 25
- Demonstrate knowledge of the options and features that can be programmed in a radio
- Create templates for the programming of subscribers in a system

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- Basic features and options of two-way radios basic concepts of trunking



INSTRUCTOR-LED
LENGTH: 2 DAYS
LMS COURSE CODE:
ADT001V

XTS/XTL TECHNICAL SUBSCRIBER ACADEMY

COURSE OVERVIEW

Participants will learn the capabilities, features and functions of the XTS/XTL family of radios as well as how to correctly complete performance checks, radio alignments, disassembly/reassembly, maintenance and troubleshooting. This academy will also focus on the detailed theory of operation. The XTS/XTL Academy will also cover in detail: Radio Flashing, Encryption, Key Loading (Including configuring the XTS/XTL radio for OTAR), Programming over P25 (Over the Air Programming), Advanced System Key Management, Vacuum and Submersibility Testing, Mobile Radio Installation and many other special setup or configuration modes with the radios. In addition to lecture, large amounts of hands-on, scenario based lab work will be used to reinforce knowledge transfer.

AUDIENCE

Radio Technicians

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Distinguish between the features and specifications of the XTS and XTL 5000 radios
- Verify the correct operations of the XTS and XTL 5000 radios by completing Performance Checks and Alignment procedures
- Maintain and troubleshoot an XTS and XTL 5000 radios
- Disassemble and reassemble the radios using the documented procedures
- Verify the housing integrity of an XTS 5000R portable radio
- Flash upgrade an XTS and an XTL 5000 Radio
- Interpret the circuit theory of operation and use this information to isolate faults found at both the board and the component level

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:


- Communication Systems Concepts (NST021)
- Basic Radio (ARDS004)
- Theory of Radio Operations (RCS003E)

AND

- CPS Programming and Template Building Overview (ADT001V)

OR

- Test Out CPS Programming and Template Building (ADT001-T)



INSTRUCTOR-LED
LENGTH: 5 DAYS
LMS COURSE CODE:
ADST005

RADIO SOLUTIONS SUBSCRIBERS

For information on prerequisites and to register for courses visit the LMS at: LEARNING.MOTOROLASOLUTIONS.COM

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

APX™ CPS PROGRAMMING AND TEMPLATE BUILDING

COURSE OVERVIEW

The APX CPS Programming and Template Building course provides communications management personnel and technicians with the knowledge and training necessary to build templates and program the APX family of radios in the most efficient way possible.

AUDIENCE

Radio Technicians, System Managers

COURSE OBJECTIVES


After completing this course, the student will be able to:

- Build the APX family of programming templates using the APX CPS Programming Software
- Program the specific parameters related to the various sytem types in which the subscriber unit will operate: Conventional, Single Site Trunking, Simulcast, SmartZone or ASTRO® 25 IV&D TDMA and ASTRO® 25 IV&D X2
- Demonstrate knowledge of the APX CPS navigation, tools, options and features that make effeicient programming of the radio possible
- Demonstrate a complete understanding of the various APX CPS programming efficiency tools, such as: Cloning, Drag and Drop, Codeplug Comparison Tool, Radio Flashing, Advance System Key Administrator, Codeplug Merging and many others

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- Experience with the basic features and options of two-way radios and the basic concepts of trunking



INSTRUCTOR-LED
LENGTH: 2 DAYS
LMS COURSE CODE:
APX7001V

APX™ TECHNICAL SUBSCRIBER ACADEMY

COURSE OVERVIEW

Participants will learn the capabilities, features and functions of the APX family of radios as well as how to correctly complete performance checks, radio alignments, disassembly/reassembly, maintenance and troubleshooting. This academy will also focus on a detailed theory of operation for the APX family of radios. The APX Academy will also cover in detail: Radio Flashing, Encryption, Key Loading (Including configuring the APX radio for OTAR), Programming over P25 (Over the Air Programming), Advanced System Key Management, Vacuum and Submersibility Testing, APX Mobile Radio Installation and many other special setup or configuration modes with the radios. In addition to lecture, large amounts of hands-on with scenario based lab work will be used to reinforce knowledge transfer. This academy will cover in detail all models within the APX family of radios.

AUDIENCE

Radio Technicians

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Distinguish between the features and specifications of all available radios within the APX family of subscribers
- Verify the correct operation of the various radios within the APX family of subscribers by completing Performance Checks and Alignment procedures
- Maintain and troubleshoot radios within the APX family of subscribers
- Disassemble and reassemble various APX subscriber radios using the documented procedures

- Verify the housing integrity of an APX portable radio
- Flash upgrade the various radios within the APX family of subscribers
- Interpret the circuit theory of operation and use this information to isolate faults found at both the board and the component level


REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- Communication Systems Concepts (NST021)
- Basic Radio (ARDS004)
- Theory of Radio Operations (RCS003E)

Required:

- APX CPS Programming and Template Building (APX7001V)



INSTRUCTOR-LED
LENGTH: 5 DAYS
LMS COURSE CODE:
APX010

RADIO SOLUTIONS SUBSCRIBERS

For information on prerequisites and to register for courses visit the LMS at: LEARNING.MOTOROLASOLUTIONS.COM

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

APX™ RADIO MANAGEMENT WORKSHOP

COURSE OVERVIEW

Participants will learn the capabilities, features, and functions of the APX™ Radio Management Suite. This course will cover an APX CPS overview, APX Radio Management Overview, Basic Networking Primer, ASTRO® 25/CEN Networking and UNS Overview, and APX Radio Management Installation, Configuration, and Operations. In addition, the course will contain labs that will focus on installation, configuration, and operation using both wired and POP25 updates to APX Subscriber radios in both a LAN and WAN environment.

AUDIENCE

Radio Technicians, System Managers, Radio Programmers

COURSE OBJECTIVES


After completing this course, the student will be able to:

- Describe the APX Radio Management Suite operations and required software and hardware components
- Describe all deployment options for APX Radio Management Suite
- Configure a basic APX Radio Management system using a single PC, multiple PCs on a LAN, and multiple PCs on a WAN.
- Troubleshoot common APX Radio Management Installation, configuration, and operation issues
- Use Best Practices to implement and optimize Radio Management Performance

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- APX™ CPS Programming and Template (APX7001V Building)




INSTRUCTOR-LED
LENGTH: 3 DAYS
LMS COURSE CODE:
RDS2017

RADIO SOLUTIONS **SUBSCRIBERS**

For information on prerequisites and to register for courses visit the LMS at: LEARNING.MOTOROLASOLUTIONS.COM

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com



TETRA SUBSCRIBER END-USER OPERATOR COURSES

AVAILABLE FOR ST7000, MTP3000 SERIES, MTP6000 SERIES, MTM5000 SERIES AND MTP8000EX.

- [Click here](#) to go to the LMS to get additional information and to register for the following subscriber courses. The course description to the right applies to all courses listed below.
- ST7000 END-USER OPERATOR** (DMT1083)
 - MTP3000 END-USER OPERATOR** (DMT1054)
 - MTP6000 END-USER OPERATOR** (DMT1068)
 - MTM5000 END-USER OPERATOR** (DMT1070)
 - MTP8000EX END-USER OPERATOR** (DMT1069)
 - MOTOTRBO SUBSCRIBER TECHNICAL ENABLEMENT** (PCT2017)
 - WEARABILITY OPTIONS FOR THE SI SERIES VIDEO SPEAKER MICROPHONE** (PSA1047)
 - SI 500 RADIO MANAGEMENT R2.X** (PSA1053)
 - SI500 END USER TRAINING** (PSA1054)
- 
- # OTHER SUBSCRIBER COURSES

[Click here](#) to go to the LMS to get additional information and to register for the following subscriber courses.

 - GENERAL COURSES**
 - TETRA TERMINAL PROGRAMMING (CPS PLUS)** (TTER01PLUS)
 - TRACES WORKSHOP** (TMSC04)
 - INTEGRATED TERMINAL MANAGEMENT (REMOTE PROGRAMMING)** (DMT1050)
 - TETRA ACCESSORIES OVERVIEW** (DMT1018)
 - TETRA RADIO OVERVIEW** (AAE1403)

COURSE OVERVIEW

Our subscriber end-user operator courses will provide the background information and the knowledge equired to allow delegates to be fully conversant with the features and functions of their chosen subscriber. It will provide users with an introduction to their subscriber, its operation and builds on theoretical instruction with practical exercises designed to allow delegates to practice and confirm their understanding of all features and functions covered in the course.

AUDIENCE

Radio end-user operators

COURSE OBJECTIVES

- The goal of the End User Operator course is to keys and controls.
- Describe radio preparation including assembly and battery charging.
 - Make all available Trunked Mode and Direct Mode calls.
 - List optional features available to the subscriber.
 - Perform basic subscriber troubleshooting.


REQUISITE KNOWLEDGE

None.

RADIO SOLUTIONS **SUBSCRIBERS**

For information on prerequisites and to register for courses visit the LMS at: LEARNING.MOTOROLASOLUTIONS.COM

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com



TETRA SUBSCRIBER SERVICE TRAINING

[Click here](#) to go to the LMS to get additional information and to register for the following subscriber service training. The course description to the bottom applies to all courses listed below.

- MTM5X00 / MTM800FUG / MTM800FUG ET LEVEL 2 SERVICE TRAINING** (DMT0018)
- ST7000 LEVEL 2 SERVICE TRAINING** (DMT0025)
- MTP8000EX SERIES LEVEL 2 SERVICE TRAINING** (DMT0023)
- MTP3000 SERIES LEVEL 2 SERVICE TRAINING** (DMT0010)
- MTP6000 SERIES L2 SERVICE TRAINING** (DMT1069)

COURSE OVERVIEW

These courses are intended to train Motorola Solutions authorised service personnel on how to carry out Level-Two service on the respective devices. The training includes a comprehensive practical exercise designed to allow delegates to practice and confrom their understanding of all features and functions covered in these courses.

AUDIENCE

Radio Technicians

COURSE OBJECTIVES

The goal of the Service Training course is to teach the participants to:

- Understand the product specifications.
- Program the device using the CPS.
- Initiate performance tests.
- Tune the radio.
- Disassemble and reassemble the radio.

REQUISITE KNOWLEDGE

- Radio Communication Fundamentals
- Knowledge of basic two-way FM and Digital Communications

MOTOTRBO™ SUBSCRIBER AND REPEATER TECHNICAL SERVICE ACADEMY

COURSE OVERVIEW

Participants will learn the capabilities, features and functions of the MOTOTRBO™ family of radios and repeaters as well as how to correctly complete performance checks, radio alignments, disassembly/reassembly, maintenance, and troubleshooting. This Academy will also focus on the detailed theory of operation. In addition to lecture, large amounts of hands on, scenario based lab work will be used to reinforce knowledge transfer. This Academy will cover in detail different models within the MOTOTRBO™ family of radios and repeaters.

AUDIENCE


Radio Technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Distinguish between the features and specifications of the MOTOTRBO™ portable and mobile radios and repeaters
 - Verify the correct operations of the MOTOTRBO™ radios and repeaters by completing Performance Checks and Alignment procedures
 - Maintain and troubleshoot MOTOTRBO™ radios and repeaters
 - Disassemble and reassemble the radios using the documented procedures

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- CEDMEL2000 - Introduction to MOTOTRBO™ Systems for Technicians



INSTRUCTOR-LED
LENGTH: 4 DAYS
LMS COURSE CODE:
TB0300

RADIO SOLUTIONS SUBSCRIBERS

For information on prerequisites and to register for courses visit the LMS at: [LEARNING.MOTOROLASOLUTIONS.COM](https://learning.motorolasolutions.com)

For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

Si500 RADIO MANAGEMENT R2.X

COURSE OVERVIEW

This course provides an overview and presentation of the basic functions available in Radio Management tool from the perspective of Si devices management. It includes video simulations of typical operations performed in Radio Management on Si devices, together with useful tips and practical examples.

AUDIENCE

Radio Management users

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Describe the Radio Management application and its features.
- Lead users through their first logging.
- Demonstrate typical operations performed in Radio Management on Si devices.

REQUISITE KNOWLEDGE

None



ONLINE, SELF-PACED
LENGTH: 1 HOUR
LMS COURSE CODE:
PSA1053

PUBLIC SAFETY LTE LEX L10i MISSION CRITICAL HANDHELD OVERVIEW

COURSE OVERVIEW

The Public Safety LTE LEX L10i Mission Critical Handheld Overview instructor-led course presents an overview of the LEX L10i Mission Critical Handheld, including hands on practice of managing and validating devices using available methods. Maintaining and troubleshooting the LEX L10i is also covered.

AUDIENCE

Field Technicians

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Describe LEX L10i features.
- Perform user operation procedures on the LEX L10i.
- Perform management procedures on the LEX L10i.
- Perform validation procedures on the LEX L10i.
- Perform maintenance procedures on the LEX L10i.
- Perform troubleshooting procedures on the LEX L10i.

REQUISITE KNOWLEDGE

None



INSTRUCTOR-LED
LENGTH: 1 DAY
LMS COURSE CODE:
LTE1024

PUBLIC SAFETY LTE VEHICULAR SUBSCRIBER MODEM WORKSHOP

COURSE OVERVIEW

The Public Safety LTE Vehicular Subscriber Modem User program is an instructor-led training course describing the LTE Vehicle Subscriber Modem including a hands-on practice of the modem operation. The course is designed to provide an overview of the LTE Vehicle Subscriber Modem, how it is installed and some of the technical issues that may arise after installation.

AUDIENCE

First Responders, End Users, Technicians

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Recognize and describe the Vehicle Subscriber Modem (VSM).
- Describe the components used with the VSM.
- Understand the installation requirements.
- Understand where the VSM fits within the Public Safety LTE system.
- Recognize the VSM Status Utility and understand its function.
- Troubleshoot general connection problems.
- Understand the meaning of the different LED indicators.

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- Public Safety LTE System Overview (AAE1603)



INSTRUCTOR-LED
LENGTH: 1 DAY
LMS COURSE CODE:
LTE1023



MOTOTRBO™ SYSTEMS PORTFOLIO



CLICK HERE TO VIEW THE
SCHEDULE



MOTOTRBO™ COURSES

MOTOTRBO™ SYSTEM INTRODUCTION FOR TECHNICIANS (CEDMEL2000)	77
MOTOTRBO™ SYSTEMS APPLIED NETWORKING (PCT2007)	77
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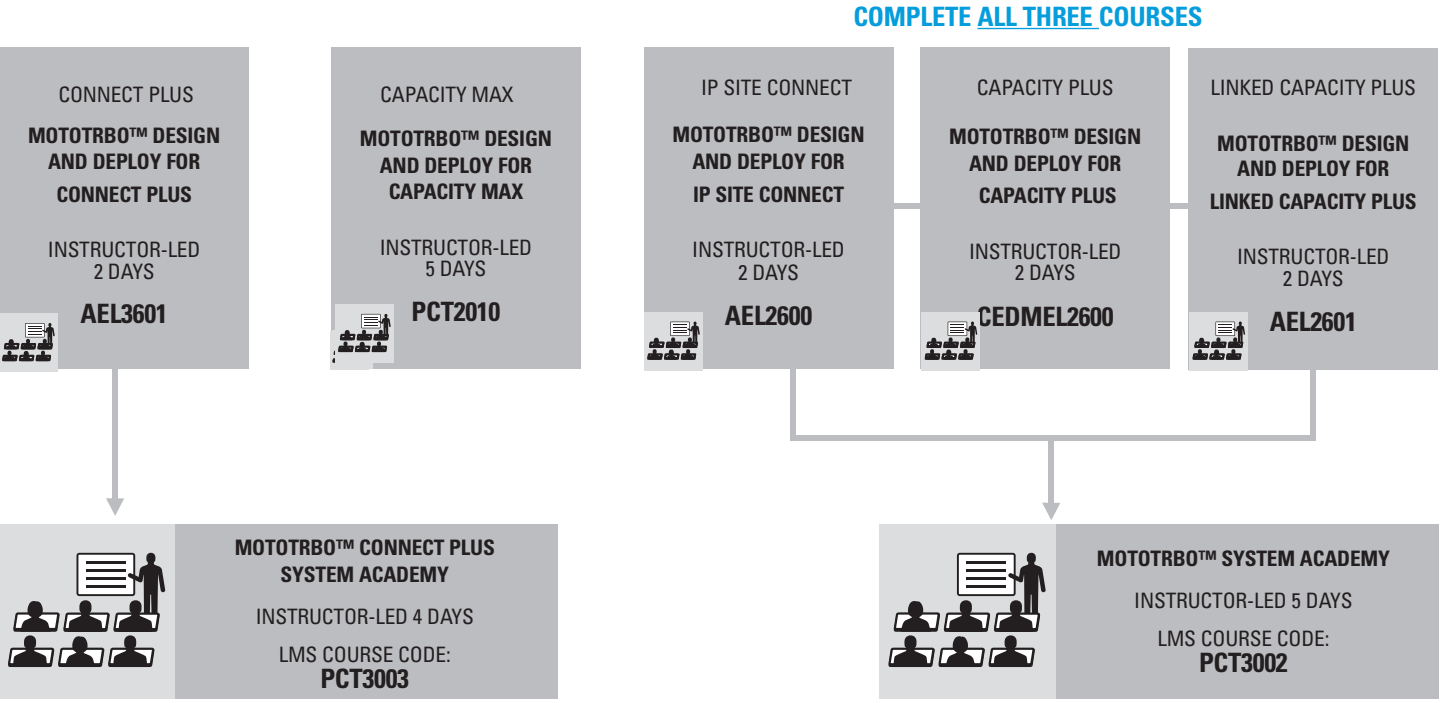
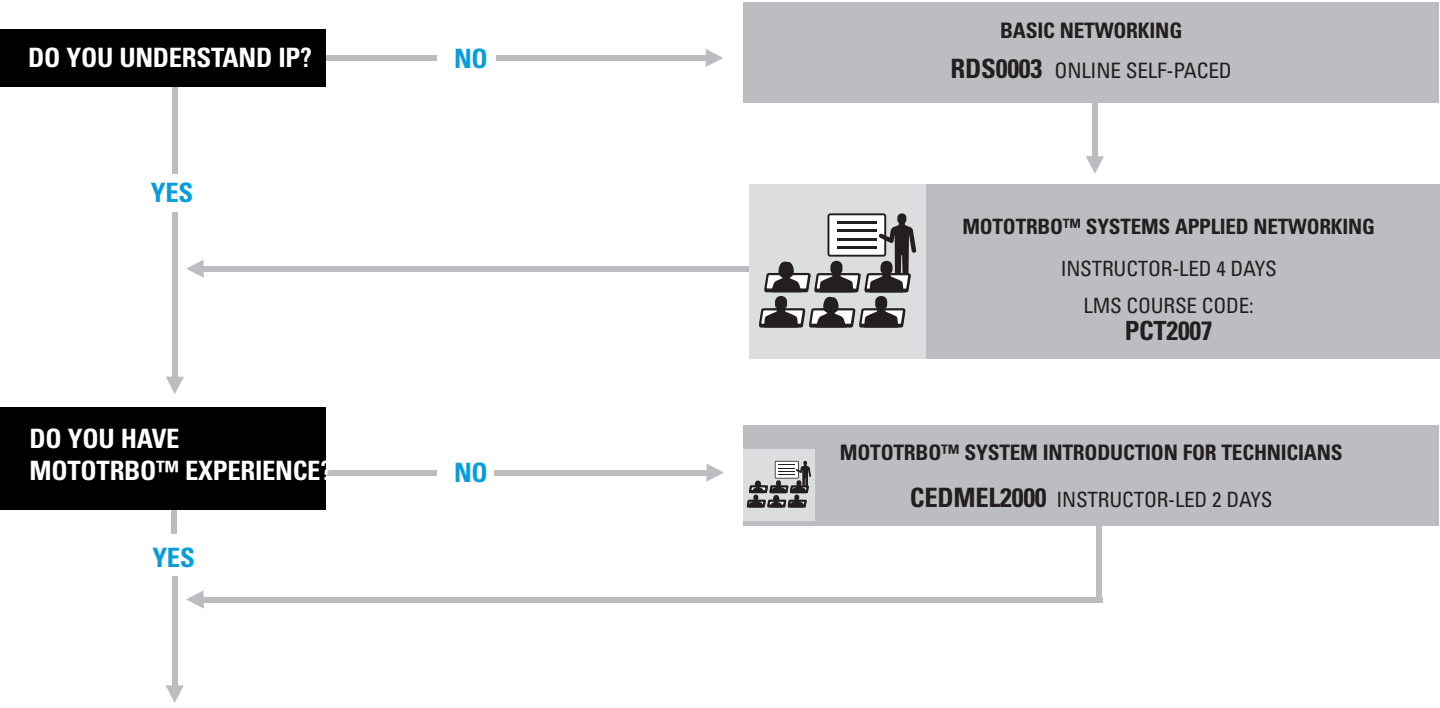
THE LEARNING MANAGEMENT SYSTEM (LMS)

To register for a course, go to learning.motorolasolutions.com

RADIO SOLUTIONS **MOTOTRBO™**
For information on prerequisites and to register for courses visit the LMS at: [LEARNING.MOTOROLASOLUTIONS.COM](http://learning.motorolasolutions.com)

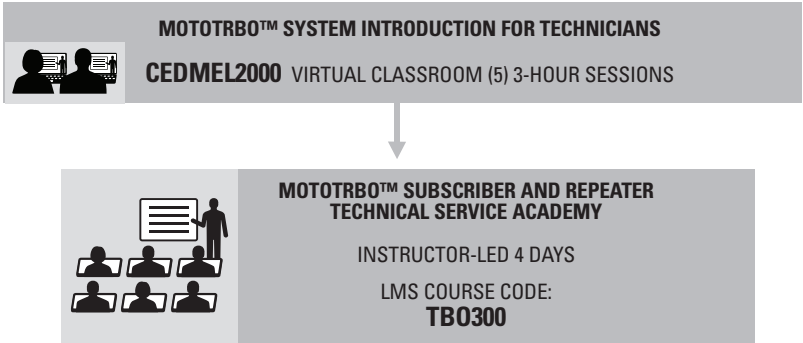
For general information contact the Latin America Education Services help desk at: training.LACR@motorolasolutions.com

MOTOTRBO™ TECHNICAL TRAINING CURRICULUM BASED ON YOUR CURRENT IP AND MOTOTRBO™ EXPERIENCE



CURRICULUM COMPLETE
PARTICIPANT SHOULD BE ABLE TO DESCRIBE THE KEY CHARACTERISTICS OF THE SYSTEM, DESCRIBE THE KEY CONFIGURATION ITEMS IN BOTH SUBSCRIBERS AND REPEATERS, PROGRAM EFFECTIVE REPEATER AND SUBSCRIBER CODEPLUG TEMPLATES FOR THE SYSTEM, AND DESCRIBE THE APPLICABLE IP NETWORKING REQUIREMENTS WHEN DESIGNING A SYSTEM.

**MOTOTRBO™ TECHNICAL TRAINING CURRICULUM
FOR SUBSCRIBER / REPEATER MAINTENANCE TECHNICIAN**



CURRICULUM COMPLETE

PARTICIPANT WILL LEARN THE COMMON MOTOTRBO™ FEATURES AND CAPABILITIES TO DESIGN AND DEPLOY MOTOTRBO™ SYSTEMS. PARTICIPANT SHOULD BE ABLE TO COMPLETE PERFORMANCE CHECKS, RADIO ALIGNMENTS, DISASSEMBLY/REASSEMBLY, MAINTENANCE, AND TROUBLESHOOTING OF VARIOUS MOTOTRBO™ RADIO TYPES.

MOTOTRBO™ SYSTEM INTRODUCTION FOR TECHNICIANS

COURSE OVERVIEW

This is an introductory course to the MOTOTRBO™ system theory of operation, key components and topologies. MOTOTRBO™ Systems Introduction for Technicians gives the Professional-Level Empower Certification seekers all the basic information they need to know about common MOTOTRBO™ features and capabilities, along with system design and deploy principles. Upon successfully completing this course, individuals should be ready to take the more advanced Design and Deploy courses for IP Site Connect, Capacity Plus (Multi-Site and Single Site), Capacity Max and/or Connect Plus.

AUDIENCE


Anyone who will sell, design, configure, deploy, or maintain MOTOTRBO™ Digital Radio Systems. This would include, but is not limited to: Design Engineers, Communication System Technicians, Technical Support Personnel and Service Technicians.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe the different components available to build your MOTOTRBO™ system.
 - Explain the MOTOTRBO™ Modes and Systems.
 - Describe the various Data Application's capabilities and everyday uses within the MOTOTRBO™ systems.
 - Describe MOTOTRBO™s Digital and Analog features.
 - Explain system and channel capacity planning.
 - Explain MOTOTRBO™ IP network design considerations.
 - Describe organizational requirement and resources needed to design the fleetmap.
 - Describe the use and purpose of various tools such as: Radio Management, Tuner, RDAC, Air Tracer, Site Survey and 3rd Party Application Tools.
 - Navigate the main screens of the Customer Programming Software (CPS) needed to configure the radios and repeaters.

REQUISITE KNOWLEDGE

- Participants should have a basic understanding of radio communication fundamentals.
- Knowledge of basic two-way FM and digital communications theory.
- RDS0003 – Basic Networking
 - RDS0002 – Basic RF
 - RDS0004 – Basic Radio
 - AAE1402 – Professional and Commercial Radios (PCR) Portfolio Overview



INSTRUCTOR-LED
LENGTH: 2 DAYS
LMS COURSE CODE:
CEDMEL2000

**MOTOTRBO™ SYSTEMS
APPLIED NETWORKING**

COURSE OVERVIEW

The MOTOTRBO™ Systems Applied Networking provides technicians with the necessary information required for understanding the typical networking requirements for implementing a variety of MOTOTRBO™ solutions. The course includes familiarization/review of basic networking concepts and MOTOTRBO™-specific networking requirements. This course will focus on specific configurations for IP Site Connect, Linked Capacity Plus, and Connect Plus trunking systems.

AUDIENCE


Technical System Managers and technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Recall Basic Networking Concepts
 - Indentify recommended netwrk components for MOTOTRBO™ systems
 - Define LAN/WAN topologies for MOTOTRBO™ systems
 - Perform backup, restore and recovery of recommended network components
 - Identify network security concepts for MOTOTRBO™ systems

REQUISITE KNOWLEDGE

- Completion of the following course(s) or equivalent experience:
- Networking Essentials in Motorola Solutions Communication Systems (NST762)



INSTRUCTOR-LED
LENGTH: 4 DAYS
LMS COURSE CODE:
PCT2007

RADIO SOLUTIONS MOTOTRBO™

For information on prerequisites and to register for courses visit the LMS at:
[LEARNING.MOTOROLASOLUTIONS.COM](https://learning.motorolasolutions.com)

For general information contact the Latin America Education Services Desk at:
training.LACR@motorolasolutions.com

MOTOTRBO™ RADIO MANAGEMENT WORKSHOP

COURSE OVERVIEW

PThe MOTOTRBO™ Radio Management 2.0 Workshop course provides technicians with the necessary information and practice to use the MOTOTRBO™ Radio Management 2.0 programming tool effectively.

AUDIENCE

System Managers and Technicians

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Deploy and use RM 2.0 in a variety of real-world scenarios.
- Create and maintain configurations for basic MOTOTRBO™ Configurations (Connect Plus and Capacity Max excluded).
- Utilize Wi-Fi programming within RM 2.0.
- Use the RM Import and Export feature for database population.
- Convert existing radio templates and codeplugs to RM 2.0 Configurations.
- License and activate Radio and Application features.
- Use advanced features such as Data Mining.
- Use RM 2.0 to ease mass-deployments of subscribers.

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- PCT1032 MOTOTRBO™ Radio Management 2.0 Configuration Mode completion
- Networking Essentials or Network + Certification
- A high-level working knowledge of IP networking is very important

MOTOTRBO™ SUBSCRIBER AND REPEATER TECHNICAL SERVICE ACADEMY

COURSE OVERVIEW

Participants will learn the capabilities, features and functions of the MOTOTRBO™ family of radios and repeaters as well as how to correctly complete performance checks, radio alignments, disassembly/reassembly, maintenance, and troubleshooting. This Academy will also focus on the detailed theory of operation. In addition to lecture, large amounts of hands on, scenario based lab work will be used to reinforce knowledge transfer. This Academy will cover in detail different models within the MOTOTRBO™ family of radios and repeaters.

AUDIENCE

Radio Technicians

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Distinguish between the features and specifications of the MOTOTRBO™ portable and mobile radios and repeaters
- Verify the correct operations of the MOTOTRBO™ radios and repeaters by completing Performance Checks and Alignment procedures
- Maintain and troubleshoot MOTOTRBO™ radios and repeaters
- Disassemble and reassemble the radios using the documented procedures

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- CEDMEL2000 - Introduction to MOTOTRBO™ Systems for Technicians

MOTOTRBO™ CAPACITY MAX DESIGN AND DEPLOY

COURSE OVERVIEW

MOTOTRBO™ Capacity Max Design and Deploy begins by covering the design process for a Capacity Max Radio system. Under the Instructor's guidance, participants will have the opportunity to practice designing and deploying a small scale, 2 Site/3 Channel, Capacity Max system in a safe classroom environment. This course will also cover how to configure Capacity Max using Radio Management 2.0 Configuration Mode. In order to get the most of the hands-on activities, Participants MUST bring their own laptop to class with the latest RM 2.0 Configuration Mode software loaded. Please download this software from MOL (Motorola Solutions Online).

AUDIENCE

Dealers, Channel Partner, Technicians, MSI Employees

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Design a simple a 1-System 2 Site/3 Channel Capacity Max system
- Calculate Capacity Max capacity and bandwidth using a Case Scenario and System Design tools.
- Using Radio Management Configuration Mode, configure your radios and infrastructure.
- Deploy a 1-System 2 Site/3 Channel Capacity Max system.
- Using System Advisor, learn the fundamentals of troubleshooting and maintaining a Capacity Max system
- Execute Radio Management database backup and restore
- Describe how to optimize a Capacity Max system

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- CEDMEL2000 - MOTOTRBO™ System Introduction for Technicians.
- PCT1047 – MOTOTRBO™ Capacity Max Technical Overview (OLT)
- PCT1046 – MOTOTRBO™ Capacity Max Theory of Operations (OLT)
- PCT1032 – Radio Management 2.0 Configuration Mode (OLT)
- Understanding IP Network Addressing
- Knowledge of RF Propagation modelling tools

RADIO SOLUTIONS MOTOTRBO™

For information on prerequisites and to register for courses visit the LMS at:
[LEARNING.MOTOROLASOLUTIONS.COM](https://learning.motorolasolutions.com)

For general information contact the Latin America Education Services help desk at:
training.LACR@motorolasolutions.com

MOTOTRBO™ DESIGN AND DEPLOY FOR CAPACITY PLUS

COURSE OVERVIEW

MOTOTRBO™ Capacity Plus Design and Deploy training covers the key components and architectures of MOTOTRBO™ Capacity Plus Radio systems. Participants will be able to describe the MOTOTRBO™ Capacity Plus system, its capabilities, system components, and data applications. Participants will also be able to describe various MOTOTRBO™ Capacity Plus system topologies. They will learn how to design and deploy a MOTOTRBO™ Capacity Plus radio system. This course will also cover how to configure a MOTOTRBO™ Capacity Plus system using MOTOTRBO™ Customer Programming Software (CPS).

AUDIENCE

System Managers and Technicians

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Describe the MOTOTRBO™ Capacity Plus system, its capabilities, system components, and data application.
- Describe the MOTOTRBO™ Capacity Plus theory of operation.
- Describe the available MOTOTRBO™ Capacity Plus topologies.
- Learn the steps needed to configure a Capacity Plus system using MOTOTRBO™ CPS to program the subscribers and repeaters.

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- RDS0003 – Basic Networking
- RDS0002 – Basic RF
- RDS0004 - Basic Radio
- AAE1402 – Professional and Commercial Radios (PCR) Portfolio Overview
- CEDMEL2000 – MOTOTRBO™ System Introduction for Technicians

MOTOTRBO™ DESIGN AND DEPLOY FOR LINKED CAPACITY PLUS

COURSE OVERVIEW

MOTOTRBO™ Linked Capacity Plus Design and Deploy training introduces the key components and architectures of MOTOTRBO™ Linked Capacity Plus Radio systems. Participants will be able to describe the MOTOTRBO™ Linked Capacity Plus system, its capabilities, system components, and data applications. Participants will also be able to describe the MOTOTRBO™ Linked Capacity Plus system topology. They will learn what's involved with Designing and Deploying a MOTOTRBO™ Linked Capacity Plus radio system. This course will also cover how to configure a MOTOTRBO™ Linked Capacity Plus system using MOTOTRBO™ Customer Programming Software (CPS).

AUDIENCE

System Managers and Technicians

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Describe the MOTOTRBO™ Linked Capacity Plus system, its capabilities, system components, and data application.
- Describe the MOTOTRBO™ Linked Capacity Plus theory of operation.
- Describe the available MOTOTRBO™ Linked Capacity Plus topologies.
- Learn the steps needed to configure a Linked Capacity Plus system using MOTOTRBO™ CPS to program the subscribers and repeaters.

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- RDS0003 – Basic Networking
- RDS0002 – Basic RF
- RDS0004 - Basic Radio
- AAE1402 – Professional and Commercial Radios (PCR) Portfolio Overview
- CEDMEL2000 – MOTOTRBO™ System Introduction for Technicians

MOTOTRBO™ DESIGN AND DEPLOY FOR IP SITE CONNECT

COURSE OVERVIEW

MOTOTRBO™ IP Site Connect Design and Deploy training introduces the key components and architectures of the MOTOTRBO™ IP Site Connect radio systems. Participants will be able to describe the MOTOTRBO™ IP Site Connect system and its capabilities, system components, and data applications capabilities. Participants will also be able to describe various MOTOTRBO™ IP Site Connect system topologies. Participants will learn how to design and deploy a MOTOTRBO™ IP Site Connect radio system. This course will also cover how to configure a MOTOTRBO™ IP Site Connect System using MOTOTRBO™ Customer Programming Software. This course was designed for individuals who already have a good understanding of MOTOTRBO™ systems, but who want to now focus on IP Site Connect.

AUDIENCE

System Managers and Technicians

COURSE OBJECTIVES

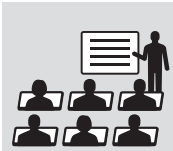
After completing this course, the student will be able to:

- Describe the MOTOTRBO™ Capacity Plus system, its capabilities, system components, and data application.
- Describe the MOTOTRBO™ Capacity Plus theory of operation.
- Describe the available MOTOTRBO™ Capacity Plus topologies.
- Learn the steps needed to configure a Capacity Plus system using MOTOTRBO™ CPS to program the subscribers and repeaters.

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- RDS0003 – Basic Networking
- RDS0002 – Basic RF
- RDS0004 - Basic Radio
- AAE1402 – Professional and Commercial Radios (PCR) Portfolio Overview
- CEDMEL2000 – MOTOTRBO™ System Introduction for Technicians



INSTRUCTOR-LED
LENGTH: **2 DAYS**
LMS COURSE CODE:
PCT2022



INSTRUCTOR-LED
LENGTH: **4 DAYS**
LMS COURSE CODE:
TBO300



INSTRUCTOR-LED
LENGTH: **5 DAYS**
LMS COURSE CODE:
PCT2010



INSTRUCTOR-LED
LENGTH: **2 DAYS**
LMS COURSE CODE:
CEDMEL2600AEL



INSTRUCTOR-LED
LENGTH: **2 DAYS**
LMS COURSE CODE:
AEL2601AEL



INSTRUCTOR-LED
LENGTH: **2 DAYS**
LMS COURSE CODE:
AEL2600AEL

 [CLICK HERE TO VIEW THE SCHEDULE](#)

RADIO SOLUTIONS **MOTOTRBO™**

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training.LACR@motorolasolutions.com

DESIGN AND DEPLOY FOR
CAPACITY PLUS, LINKED CAPACITY
PLUS AND IP SITE CONNECT

COURSE OVERVIEW

This course will guide you in migrating from a Connect Plus system to Capacity Max radio system. It will walk you through the process and teach you how to install, configure, and troubleshoot the Capacity Max Bridge (CMB). Differences in system operations will also be discussed.

AUDIENCE

System Managers and Technicians

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Describe the features and capabilities of the Capacity Max Bridge (CMB)
- Use Radio Management to configure the CMB for your system
- List the types of calls the CMB can bridge and the differences between the two MOTOTRBO systems
- Monitor the CMB for optimal performance

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- AEL3601 – MOTOTRBO Connect Plus Design and Deploy
- PCT2010 – MOTOTRBO Capacity Max Design and Deploy

MOTOTRBO™ CONNECT PLUS
DESIGN AND DEPLOY

COURSE OVERVIEW

MOTOTRBO™ Connect Plus Design and Deploy introduces the key components and architectures of a MOTOTRBO™ Connect Plus Digital Radio system. The goal of the training is to teach participants how to correctly design and deploy a Connect Plus system in the field.

AUDIENCE

System Managers and Technicians

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Describe the MOTOTRBO™ Connect Plus system.
- Describe in detail MOTOTRBO™ Connect Plus theory of operation.
- Identify the available MOTOTRBO™ Connect Plus topologies.
- Configure a MOTOTRBO™ Connect Plus system using MOTOTRBO™ CPS to program both MOTOTRBO™ radios and MOTOTRBO™ repeaters.
- Configure a MOTOTRBO™ option board using MOTOTRBO™ Connect Plus Option Board CPS.
- Use the MOTOTRBO™ Connect Plus Network Management Application to configure, monitor, and make adjustments to MOTOTRBO™ Connect Plus sites and subscriber units.

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- CEDMEL2000: MOTOTRBO™ System Introduction for Technicians

One or more of the following:

- AEL2600: MOTOTRBO™ IP Site Connect Design and Deploy
- CEDMEL2600: MOTOTRBO™ Capacity Plus Design and Deploy
- AEL2601: MOTOTRBO™ Linked Capacity Plus Design and Deplo

MOTOTRBO™
SYSTEM ACADEMY

COURSE OVERVIEW

This course allows the participant to acquire in-depth hands-on experience planning, configuring and deploying the following MOTOTRBO™ Systems and Solutions: Digital Conventional, IP Site Connect, Capacity Plus and Linked Capacity Plus.

NOTE: MOTOTRBO™ Connect Plus Systems are covered in a separate class, please reference course Design and Deploy for MOTOTRBO™ Connect Plus (AEL3601) to learn how to plan, configure and deploy MOTOTRBO™ Connect Plus systems

AUDIENCE

System Administrators, System Technicians, Field Technicians

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Create and implement functional programming templates for example radio sites and systems that include:
 - Digital Conventional simplex and repeater-based systems.
 - IP Site Connect multisite conventional systems.
 - Capacity Plus single-site trunked systems.
 - Linked Capacity Plus multisite trunked systems.

Students will also receive instruction and/or hands-on experience with:

- Receiver voting topologies.
- Integrating MOTOTRBO™ Anywhere
- Integrating Avtec Scout consoles

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- MOTOTRBO™ System Introduction for Technicians (CEDMEL2000)
- MOTOTRBO™ Design and Deploy for IP Site Connect (AEL2600)
- MOTOTRBO™ Design and Deploy for Capacity Plus (CEDMEL2600)
- MOTOTRBO™ Design and Deploy for Linked Capacity Plus (AEL2601)

RADIO SOLUTIONS **MOTOTRBO™**

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For general information contact the Latin America Education Services help desk at:
training.LACR@motorolasolutions.com

MOTOTRBO™ SYSTEM ACADEMY FOR CONNECT PLUS

COURSE OVERVIEW

MOTOTRBO™ Connect Plus System Academy allows the participant to acquire in-depth experience planning, configuring and deploying MOTOTRBO™ Connect Plus Trunking systems in a hands-on laboratory environment. This course reinforces and provides tangible context for individuals who have completed the virtual instructor-led MOTOTORBO Design and Deploy course and who wish to master the key elements of the MOTOTRBO™ Connect Plus Digital Radio system.

AUDIENCE

System Administrators, System Technicians, Field Technicians, Support Personnel

COURSE OBJECTIVES

After completing this course, the student will be able to:

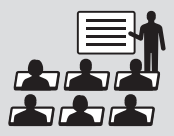
- Apply Connect Plus system theory and technical capabilities and features to real-world scenarios.
- Create and implement functional programming templates for Connect Plus subscribers and repeaters.
- Configure Connect Plus XRC site controllers for single and multi-site systems.
- Configure Connect Plus XRT gateways for key applications such as MOTOTRBO™ Anywhere.
- Configure site controller redundancy.
- Determine bandwidth requirements for inter-site links using the Connect Plus System Planner.
- Configure Auto-Fallback operation in subscribers and the site infrastructure.
- Configure Emergency Calling and Emergency Alert operation.

- Configure option board codeplugs for over the air delivery.
- Perform over the air programming (OTAP) of key subscriber files such as the network frequency file, option board firmware and option board codeplugs.
- Describe and configure Network Address Translation (NAT) in site routers that are representative of typical customer equipment.
- Troubleshoot Connect Plus systems from the network, subscriber, and repeater perspectives.


REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- MOTOTRBO™ System Introduction for Technicians (CEDMEL2000)
- MOTOTRBO™ Connect Plus Design and Deploy (AEL3601)




INSTRUCTOR-LED
LENGTH: 5 DAYS
LMS COURSE CODE:
PCT3003



INSTRUCTOR-LED
LENGTH: 5 DAYS
LMS COURSE CODE:
AEL2304



INSTRUCTOR-LED
LENGTH: 4 DAYS
LMS COURSE CODE:
AEL3601



INSTRUCTOR-LED
LENGTH: 4 DAYS
LMS COURSE CODE:
PCT3002

RADIO SOLUTIONS **MOTOTRBO™**

For information on prerequisites and to register for courses visit the LMS at:
LEARNING.MOTOROLASOLUTIONS.COM

For general information contact the Latin America Education Services Desk at:
training.LACR@motorolasolutions.com

**MOTOTRBO™ CONNECT PLUS
TO CAPACITY MAX MIGRATION
TRAINING**

COURSE OVERVIEW

This Virtual Instructor-Led training will guide you in migrating a Connect Plus to a Capacity Max radio system using the Capacity Max Bridge (CMB). Receive expert guidance on how to install, configure, and troubleshoot the CMB while also learning about the differences in system operations.

NOTE: : To gain the most benefit from this training, field experience or proficiency at deploying both Capacity Max and Connect Plus systems is strongly recommended.

AUDIENCE

Dealers, Channel Partners, Technicians, MSI Employees

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Describe the features and capabilities of the Capacity Max Bridge (CMB).
- Use Radio Management to configure the CMB for your system.
- List the types of calls the CMB can bridge and the differences between the two MOTOTRBO™ systems.
- Monitor the CMB for optimal performance.

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- AEL3601 - MOTOTRBO™ Connect Plus Design and Deploy
- PCT2010 - MOTOTRBO™ Capacity Max Design and Deploy



INSTRUCTOR-LED
LENGTH: **1 DAY**
LMS COURSE CODE:
PCT3012

**DESIGN AND DEPLOY FOR
CAPACITY PLUS, LINKED CAPACITY
PLUS AND IP SITE CONNECT**

COURSE OVERVIEW

During this course delegates will cover all aspects of the SmartPTT Plus system. The course starts by providing detailed information on the system's benefits, architecture and features, including the requirements for deploying a SmartPTT system. The course then goes on to cover the installation and configuration of the Dispatch, Radioserver and associated system components and features.

AUDIENCE

Technical personnel involved in the design, deployment and installation or configuration of a SmartPTT Plus system.

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Describe the function of SmartPTT PLUS
- Describe SmartPTT PLUS solution architecture
- List the system requirements for deploying a SmartPTT PLUS solution
- Describe the process of system design for IP Site Connect, Capacity Plus, Linked Capacity Plus
- Describe the system design processes for Connect Plus
- Define the set-up, installation and configuration process for the SmartPTT PLUS Radio Server
- Define the set-up, installation and configuration process for the SmartPTT PLUS Dispatcher console functions
- Configure MOTOTRBO radios and repeaters for SmartPTT PLUS
- Configure MOTOTRBO Network Interface Service and MOTOTRBO DDMS Administrative Client

REQUISITE KNOWLEDGE

None



INSTRUCTOR-LED
LENGTH: **2 DAYS**
LMS COURSE CODE:
PCT3006

**MOTOTRBO™ CONNECT PLUS
DESIGN AND DEPLOY**

COURSE OVERVIEW

During this course delegates will cover all aspects of the SmartPTT Plus system. The course starts by providing detailed information on the system's benefits, architecture and features, including the requirements for deploying a SmartPTT system. The course then goes on to cover the installation and configuration of the Dispatch, Radioserver and associated system components and features.

AUDIENCE

Technical personnel involved in the design, deployment and installation or configuration of a SmartPTT Plus system.

COURSE OBJECTIVES

After completing this course, the student will be able to:

- Describe the function of SmartPTT PLUS
- Describe SmartPTT PLUS solution architecture
- List the system requirements for deploying a SmartPTT PLUS solution
- Describe the process of system design for IP Site Connect, Capacity Plus, Linked Capacity Plus
- Describe the system design processes for Connect Plus
- Define the set-up, installation and configuration process for the SmartPTT PLUS Radio Server
- Define the set-up, installation and configuration process for the SmartPTT PLUS Dispatcher console functions
- Configure MOTOTRBO radios and repeaters for SmartPTT PLUS
- Configure MOTOTRBO Network Interface Service and MOTOTRBO DDMS Administrative Client

REQUISITE KNOWLEDGE

None



INSTRUCTOR-LED
LENGTH: **2 DAYS**
LMS COURSE CODE:
PCT2006



PUBLIC SAFETY LTE DELIVERS A HIGH DEGREE OF THE 5 C's



**COVERAGE WITHOUT
COMPROMISE**

Public Safety LTE networks handle peak usage and prioritize system traffic to the end of coverage. Extend network coverage during disaster recovery situations and optimize coverage at the edge with LTE deployable trailers. Because first responders can instantly access video, photos, maps and more, they're better prepared to arrive at a dangerous crime scene or search patient medical records from a moving ambulance.



**CAPACITY
FOR IT ALL**

Capacity isn't only critical for emergencies, it's essential for day-to-day operations. When thousands of people converge at sports venues, concerts, festivals and rallies, mobile capacity must be sufficient and robust to keep everyone safe.



**CAPABILITIES TO IMPROVE
SITUATIONAL AWARENESS**

When public safety personnel have a unified picture of what's unfolding, they are better equipped to respond. High-speed data, location information, photos and streaming video can significantly improve collaboration and outcomes.



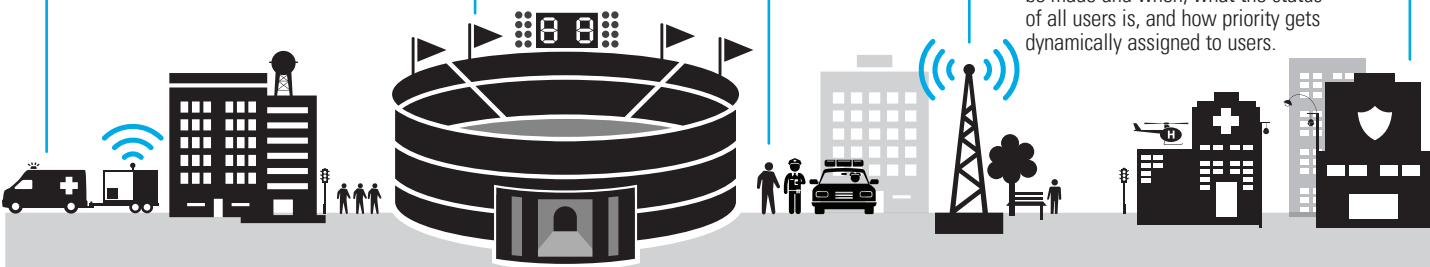
**CONTROL OF YOUR
COMMUNICATIONS**

An optimized Public Safety LTE network gives you greater control over your system, software and devices. You decide who accesses the system, what changes need to be made and when, what the status of all users is, and how priority gets dynamically assigned to users.



COST SAVING

ON A LARGE SCALE
An optimized Public Safety LTE network that saves money via economies of scale on devices and infrastructure partnership where needed.



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PUBLIC SAFETY LTE COURSES

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PUBLIC SAFETY LTE COURSES

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For general information contact the Latin America Education Services help desk at:
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PUBLIC SAFETY LTE ARCHITECTURE AND SIGNALING

COURSE OVERVIEW

This lab-based class provides students a practical understanding of 3GPP LTE/EPC signaling as used in a public safety LTE network.

Students use an Aricent EPC core system, Ericsson eNodeB, and Motorola Solutions subscriber units to: manage LTE/EPC network elements and interfaces, determine subscriber and network element status, capture and analyze LTE signaling, and analyze end-to-end service signaling and quality of service.

AUDIENCE

Customers

COURSE OBJECTIVES


After completing this course, the student will be able to:

- Describe LTE network elements and function
- Describe LTE/EPC interfaces
- Analyze LTE/EPC signaling flows
- Evaluate network element status based on NE interface and signaling state
- Trace UE state based on signaling
- Validate and troubleshoot end-to-end service signaling
- Describe LTE Quality of Service (QoS) operation
- Describe LTE to ASTRO® 25 inter-working options

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- Public Safety LTE System Overview (AAE1603)
- Networking Essentials in Motorola Solutions Communicatons Equipment (NST762)



INSTRUCTOR-LED
LENGTH: 5 DAYS
LMS COURSE CODE:
LTE2005

PUBLIC SAFETY LTE SYSTEM ADMINISTRATION

COURSE OVERVIEW

PS LTE System Administration training covers the key functionality and tasks required to administer and manage a Public Safety LTE system. Participants will understand the functionality of the management applications, requirements for subscriber provisioning, requirements for proper quality of service, fault management and other network administration needs. Participants will perform tasks demonstrating proficiency in using the applications resident on the OSP platform.

AUDIENCE

Customer System Manager, Customer Technical Staff, MSI employee

COURSE OBJECTIVES


After completing this course, the student will be able to:

- Understand the function of the Operations Support Platform (OSP) and how it is used to manage the PS LTE system.
- Access the Unified Provisioning Manager (UPM) and provision end users and UICCs on the PS LTE system.
- View and manage faults using the Unified Event Manager (UEM).
- Access the Log Management application to view and manage syslog messages.
- Monitor the performance of the system using PM reports.
- View eNodeB fault and performance status within a graphical map using the Network Monitor application.
- Manage and control access to the OSP platform and the suite of management applications residing on the OSP.
- Access the OSP virtual machines and perform administrative actions.

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- Basic Networking (RDS0003)
- PS LTE System Overview (AAE1603)



INSTRUCTOR-LED
LENGTH: 5 DAYS
LMS COURSE CODE:
LTE2006

PUBLIC SAFETY LTE APPLIED NETWORKING

COURSE OVERVIEW

The Public Safety LTE Applied Networking course covers the operation and maintenance of Motorola Solutions supplied network transport equipment used in a PS LTE network. Participants will learn the operation and replacement tasks required to maintain Layer 2 switches, Layer 3 switches, the NTP server, DNS server, firewalls, and other devices which provide backhaul transport and connectivity services in the network.

This lab-based course offers students practice with critical maintenance procedures on standalone equipment without impacting network operation.

AUDIENCE

Customer System Managers, Customer Network Transport Technical Staff

COURSE OBJECTIVES


After completing this course, the student will be able to:

- Check and manage status of LTE network transport devices
- Upgrade and downgrade device firmware or operating system
- Backup and restore device configuration
- Replace device hardware
- Validate and troubleshoot device operation


REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- Public Safety LTE System Overview (AAE1603)
- Networking Essentials in Motorola Solutions Communicatons Equipment (NST762)



INSTRUCTOR-LED
LENGTH: 5 DAYS
LMS COURSE CODE:
LTE2007



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SCHEDULE**

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PUBLIC SAFETY LTE LEX L10i MISSION CRITICAL HANDHELD OVERVIEW

COURSE OVERVIEW

The Public Safety LTE LEX L10i Mission Critical Handheld Overview instructor-led course presents an overview of the LEX L10i Mission Critical Handheld, including hands on practice of managing and validating devices using available methods. Maintaining and troubleshooting the LEX L10i is also covered.

AUDIENCE

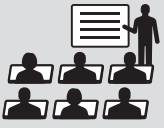
Field Technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe LEX L10i features.
 - Perform user operation procedures on the LEX L10i.
 - Perform management procedures on the LEX L10i.
 - Perform validation procedures on the LEX L10i.
 - Perform maintenance procedures on the LEX L10i.
 - Perform troubleshooting procedures on the LEX L10i.

REQUISITE KNOWLEDGE

- None



INSTRUCTOR-LED

LENGTH: 1 DAY

LMS COURSE CODE: **LTE1024**

PUBLIC SAFETY LTE VEHICULAR SUBSCRIBER MODEM WORKSHOP

COURSE OVERVIEW

The Public Safety LTE Vehicular Subscriber Modem User program is an instructor-led training course describing the LTE Vehicle Subscriber Modem including a hands-on practice of the modem operation. The course is designed to provide an overview of the LTE Vehicle Subscriber Modem, how it is installed and some of the technical issues that may arise after installation.

AUDIENCE

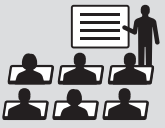
First Responders, End Users, Technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Recognize and describe the Vehicle Subscriber Modem (VSM).
 - Describe the components used with the VSM.
 - Understand the installation requirements.
 - Understand where the VSM fits within the Public Safety LTE system.
 - Recognize the VSM Status Utility and understand its function.
 - Troubleshoot general connection problems.
 - Understand the meaning of the different LED indicators.

REQUISITE KNOWLEDGE

- Completion of the following courses or equivalent experience:
- Public Safety LTE System Overview (AAE1603)



INSTRUCTOR-LED

LENGTH: 1 DAY

LMS COURSE CODE: **LTE1023**

WAVE 7000 ADMINISTRATION AND MAINTENANCE WORKSHOP

COURSE OVERVIEW

The course covers the following:

- WAVE 7000 system overview and a list of features
- WAVE 7000 server administration, maintenance and troubleshooting content
- PSX PTT application overview, available call types

The intent of the course is to present the WAVE 7000 system in the context of the entire solution including IMW and LTE elements. However, a detailed discussion of IMW and PS LTE components and applications is outside of the scope of this course.

AUDIENCE


System Administrators, Field Engineers, Support Engineers

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Provide information regarding the WAVE 7000 system, its function and capabilities.
 - Perform the call types offered within the WAVE 7000 solution.
 - Recognize WAVE 7000 administration tools and their functions.
 - Define and describe the features of WAVE 7000 system.
 - Execute back up and restore operations for WAVE 7000 system.
 - Understand and explain process of geo-redundancy, as well as its administration, maintenance, provisioning and synchronization.
 - Define and describe Secure Signaling and Service Authentication of WAVE 7000.
 - Fix the presented issues of WAVE 7000 System.

REQUISITE KNOWLEDGE

- None



INSTRUCTOR-LED

LENGTH: 3 DAYS

LMS COURSE CODE: **LTE2043**

PUBLIC SAFETY LTE COURSES

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PUBLIC SAFETY LTE SYSTEM OVERVIEW

COURSE OVERVIEW

The Public Safety LTE System Overview self-paced course presents a high-level description of the Public Safety LTE system and an introduction into the network elements that comprise the system.

AUDIENCE

System Managers, System Technicians

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe LTE (Long-Term Evolution) technologies
 - Describe the networks and their connections in a Public Safety LTE system
 - Describe the functionality of the elements in aM Public Safety LTE system
 - Describe how Prioritization works
 - Describe bearers and data paths
 - Describe the User Equipment (UE)

REQUISITE KNOWLEDGE

- None



ONLINE, SELF-PACED

LENGTH: 1 HOUR

LMS COURSE CODE: **AAE1603**



SOFTWARE & APPLICATIONS

WAVE CERTIFIED INTEGRATION ENGINEER (AST3001)	89
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INTELLIGENT MIDDLEWARE 5.2 OPERATION AND ADMINISTRATION (RDS2025)	89
UNS OPERATIONS AND ADMINISTRATION R4.0 (DMT2008)	90



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WAVE CERTIFIED INTEGRATION ENGINEER

COURSE OVERVIEW

The WAVE Certified Integration Engineer course provides instruction in designing, integrating, and troubleshooting WAVE systems. It also provides the groundwork for a basic understanding of how WAVE delivers a Radio-over-IP solution. The training scope covers WAVE integration to MOTOTRBO™, ASTRO, and DIMETRA systems.

AUDIENCE

Sales/Systems Engineers who will design and implement WAVE solutions, presale/post sale engineers, Motorola Solutions STs and FTs, partners, and customers.

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Understand and identify WAVE components.
 - Install and configure the WAVE Management Server, Media Server, Proxy Server, Desktop Communicator, Advanced Desktop Communicator, Web and Mobile Communicators.
 - Identify radio systems compatible with WAVE and list integration steps.
 - Maintain and support a WAVE domain.

REQUISITE KNOWLEDGE

- General knowledge of:
- IP Networking
 - IP Telephony
 - Server-class Operating Systems
 - Mobile Device Applications
 - LMR Radio Systems
 - Motobridge
 - MOTOTRBO™
 - VMware vSphere — server virtualization platform
 - Windows Active Directory
 - IP Security



INSTRUCTOR-LED
LENGTH: 5 DAYS
LMS COURSE CODE:
AST3001

WAVE 7000 ADMINISTRATION AND MAINTENANCE WORKSHOP

COURSE OVERVIEW

The course covers the following:

- WAVE 7000 system overview and a list of features
- WAVE 7000 server administration, maintenance and troubleshooting content
- PSX PTT application overview, available call types

The intent of the course is to present the WAVE 7000 system in the context of the entire solution including IMW and LTE elements. However, a detailed discussion of IMW and PS LTE components and applications is outside of the scope of this course.

AUDIENCE


System Administrators, Field Engineers, Support Engineers

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Provide information regarding the WAVE 7000 system, its function and capabilities.
 - Perform the call types offered within the WAVE 7000 solution.
 - Recognize WAVE 7000 administration tools and their functions.
 - Define and describe the features of WAVE 7000 system.
 - Execute back up and restore operations for WAVE 7000 system.
 - Understand and explain process of geo-redundancy, as well as its administration, maintenance, provisioning and synchronization.
 - Define and describe Secure Signaling and Service Authentication of WAVE 7000.
 - Fix the presented issues of WAVE 7000 System.

REQUISITE KNOWLEDGE

- None



INSTRUCTOR-LED
LENGTH: 3 DAYS
LMS COURSE CODE:
LTE2043

INTELLIGENT MIDDLEWARE 5.2 OPERATION AND ADMINISTRATION

COURSE OVERVIEW

The purpose of this course is to provide the steps to operate and maintain a customer's IMW 5.2 system within their Motorola Solutions system (ASTRO, DIMETRA, LTE).

AUDIENCE


Partners/Resellers and customers who would be responsible for the operation and maintenance of a customer's IMW system within their Motorola Solutions systems (ASTRO, DIMETRA, LTE).

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe IMW features.
 - Perform installation of IMW.
 - Configure an IMW system.
 - Identify the IMW tools to administer the system.
 - Perform routine administration.
 - Perform troubleshooting.
 - Understand system-specific considerations.

REQUISITE KNOWLEDGE

- None



INSTRUCTOR-LED
LENGTH: 2 DAYS
LMS COURSE CODE:
RDS2025



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SCHEDULE**

SOFTWARE & APPLICATIONS

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UNS OPERATIONS AND ADMINISTRATION R4.0

COURSE OVERVIEW

The purpose of this course is to provide the steps to operate and maintain a customer's UNS within their Motorola system (DIMETRA IP). The course should provide system so students can have hands-on practice going through the operation, maintenance, and troubleshooting steps .

AUDIENCE


Partners/Resellers and customers who would be responsible for the operation and maintenance of a customer's UNS within their Motorola system (DIMETRA IP).

COURSE OBJECTIVES

- After completing this course, the student will be able to:
- Describe the Features of UNS
 - Configure a UNS system
 - Identify the UNS tools to administer the system
 - Perform routine administration
 - Perform troubleshooting

REQUISITE KNOWLEDGE

- None



INSTRUCTOR-LED
LENGTH: 2 DAYS
LMS
COURSE CODE:
DMT2008

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MOSCAD NFM/SDM MAINTENANCE AND PROGRAMMING (FXD010)

[92](#)



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RADIO SOLUTIONS **ADDITIONAL COURSES**

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MOSCAD NFM/SDM MAINTENANCE AND PROGRAMMING

COURSE OVERVIEW

The course focuses on a detailed discussion of the different types of Network Fault Management systems, SDM3000 RTU hardware, hands-on activities with programming the RTU's, Attach Site Builder Applications for Tag Generation, Generating Tags and Files, navigating with the web browser features and the Graphic Master Computer.

AUDIENCE

System Managers, Service Technicians, Motorola Solutions Service Center, End Users

COURSE OBJECTIVES


After completing this course, the student will be able to:

- Install NFM SDM3000 builder software on students' laptops.
- Configure alarm points using SDM3000 builder.
- Generate Tags and Files to import alarm tags.
- Navigating and acknowledging alarms at the Graphic Master Computer.
- Utilize the web browser features to view and configure the system.
- Create Custom Tabs.
- Create Custom Maps.

REQUISITE KNOWLEDGE

Completion of the following course(s) or equivalent experience:

- A basic understanding of Windows navigation
- Laptop computer with Windows XP
- Windows program files must be on the "C" directory



INSTRUCTOR-LED

LENGTH: 3 DAYS

LMS COURSE CODE:
FXD010

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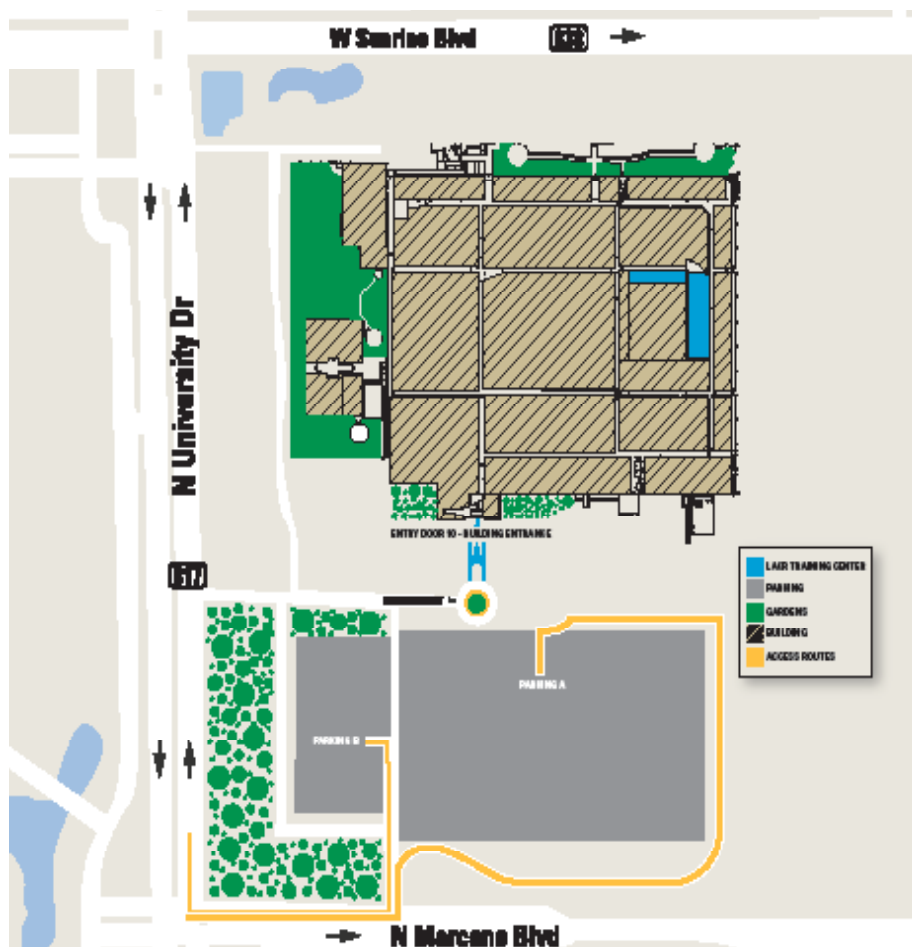
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