XCELERATE TRAINING INSTITUTE

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TELECOMMUNICATION

Tetra over LTE

DURATION	LANGUAGE	FORMAT
5 days	English	Classroom / Online

Upcoming dates

Dates	Venue	Format	Fee
12 – 16 Apr 2027	Live online	Online (live)	€1,400
18 – 22 Oct 2027	Live online	Online (live)	€1,400
15 – 19 Nov 2027	Berlin	Classroom	€4,800

Register or ask a question

Online: staging.x8ti.com/course/tetra-over-lte/

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Tetra over LTE

Introduction

This course by Xcelerate Training Institute focuses on the integration of TETRA and LTE technologies for public safety networks. It explores the challenges faced by traditional TETRA systems in meeting the demands of modern communication services, such as high-speed data transfer. The course highlights the benefits of combining TETRA and LTE to create a hybrid network that offers both voice and data services.

Learning Objectives

Upon completion, participants will gain a comprehensive understanding of TETRA and LTE technologies, their integration, and the potential benefits for public safety organizations. They will be able to evaluate the feasibility of implementing a TETRA over LTE solution and develop strategies for network modernization.

Training Methodology

The course combines theoretical knowledge with practical examples to provide a comprehensive learning experience. Participants will engage in interactive discussions, case studies, and hands-on activities to apply their knowledge.

Benefits for Your Organisation

Organizations investing in this course can expect improved network performance, enhanced public safety capabilities, and cost savings through optimized network infrastructure.

Benefits for You

Individuals will develop expertise in TETRA and LTE technologies, expanding their career opportunities in the public safety and telecommunications industry.

Who Should Attend

This course is designed for professionals working in public safety organizations, network operators, and system integrators involved in the planning and deployment of TETRA and LTE networks.

Course Outline

Introduction to TETRA and LTE

Basics of TETRA

- Overview of TETRA technology and its applications
- Key features and benefits of TETRA
- TETRA system architecture and components

Fundamentals of LTE

- Introduction to LTE technology and standards
- LTE architecture and key components (eNodeB, EPC)

- Understanding LTE air interface and spectrum usage

TETRA vs. LTE

- Comparison of TETRA and LTE features
- Use cases for TETRA in mission-critical communications
- The evolution of TETRA towards LTE integration

Integrating TETRA with LTE

TETRA over LTE Architecture

- Overview of the integration framework
- Key protocols and interfaces for TETRA over LTE
- Understanding MCPTT (Mission Critical Push-to-Talk) standards

Network Planning and Design

- Requirements for deploying TETRA over LTE
- Capacity planning and traffic management
- Site surveys and RF planning considerations

Quality of Service (QoS) in TETRA over LTE

- Understanding QoS mechanisms in LTE
- Prioritizing TETRA traffic in LTE networks
- Performance monitoring and optimization techniques

Advanced Concepts and Applications

Security in TETRA over LTE

- Overview of security requirements for mission-critical networks
- Encryption and authentication mechanisms
- Regulatory compliance and best practices

Case Studies in TETRA over LTE Deployment

- Analysis of real-world implementations
- Challenges faced and solutions developed
- Lessons learned from successful deployments

Future Trends and Innovations

- The role of 5G in TETRA evolution
- Upcoming standards and technologies
- Emerging applications for TETRA over LTE (e.g., IoT integration)

Capstone Project

- Hands-on project to design and simulate a TETRA over LTE deployment
- Group presentations and discussions
- Peer reviews and feedback on projects

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Registration Form

Tetra over LTE

Preferred dates: ..... Venue or online: .....

Duration: 5 days Language: .....

Please complete and email this form to us, or register online. We confirm your place and send the invoice within one working day.

Delegate information

Full name (Mr / Ms / Dr / Eng): .....

Position: ..... Telephone / mobile: .....

Official email: ..... Personal email: .....

Company information

Company name: .....

Address: .....

City / country: ..... VAT / tax number: .....

Person responsible for training & development

Full name (Mr / Ms / Dr / Eng): .....

Position: ..... Telephone / mobile: .....

Email: .....

Payment

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Signature: ..... Date: .....

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Open the course page