narda
satellite networks
an L3 communications company

PROGRAM DESCRIPTION

Course:	Fundamentals of Satellite Communication Networks
Delivery Method:	Instructor-Led
Target Audience:	Engineers, Technicians, Technical Managers, Operations Managers, Sales/Systems Engineers, Product Managers, Program/Project Managers
Course Length:	2 Days
Class Size:	up to 15
Description:	This course provides a comprehensive, technical overview of the components, design considerations, and operation/support issues surrounding satellite communications networks. Emerging technologies and standards are also discussed. Topics include:

- Evolution of the Satellite Communications Industry
- Anatomy of a Communications Satellite
- Governing Bodies of the Satellite Industry
- Applications of Satellite Networks for Communications
- Technical Characteristics of Satellites
- Satellite Network Design Considerations
- Link Budget Analysis
- Satellite Earth Stations
- VSAT, TVRO, and other satellite terminals
- Terrestrial Connectivity
- Operation and Maintenance of Satellite Networks
- Network Availability and Redundancy Considerations
- The DVB Broadcast Standard
- The MPEG-2 Compression Standard

- ❖ IP Multicasting, MPEG-4, Ka-Band and other emerging trends
- ❖ Case Studies of Satellite Communication Networks

Course Objectives: This course is designed to enable the participants upon completion to:

1. Understand the fundamental technical issues relative to the satellite communications industry today.
2. Understand the technical considerations in the design and implementation of a satellite network
3. Understand the economic considerations in the design and implementation of satellite networks
4. Understand how terrestrial connectivity alternatives compete with and complement satellite communications
5. Understand how satellite networks are being used today
6. Understand the technical fundamentals of emerging satellite technologies and their applications