

Course ID

**SATCOM-
EXEC**

Course Duration

1 day

Course Title

State-of-the-art of Satellite Communications for Non-engineering Professionals, Managers, and Executives

Related Courses

- Satellite Network Design Workshop: VSAT Design, Installation, and Program Management (SATSHOP, 1 day)

Aimed At

Non-engineering professionals, managers and executives with an interest in satellite communication technology and program management.

Group Size

5-25

Prerequisites

None

Course in a Nutshell

Satellites are a key component of the global communications infrastructure, including technically advanced and developing countries alike. It's the only telephony and broadband wide-area network technology that's available everywhere, from the concrete jungles to the rain forests. For anyone involved with telecommunication and information technology, understanding this technology is a fundamental requirement.

In this course you will learn both the technology and applications of satellites ranging from the early Sputnik to today's advanced nano-satellites with optical laser links. We will review the satellite system components as well as the satellite deployment process from the launch to the in-orbit operation. You will learn how a program manager plans resources and schedules for a successful deployment of a satellite VSAT network. At the end of this one-day course, you will have acquired a comprehensive overview of this technology from the technical and managerial perspective.

Customize It!

- *Are you a manager, executive, or sales person* whose work relates to satellite communications systems? Lets us know so we can emphasize the parts of the course that deal with the markets and applications of this technology to support your particular application or product.
- *Get advice and ideas* on how to deploy your own satellite network from the meeting with a potential client to the design, procurement, and installation of the network. We can help you get ready!

Learn How To

- Learn the current markets and applications for satellite communications
- Understand the key components of a satellite systems and how they work together
- Learn the theory that will help place your understanding of satellites on a sound footing
- Learn how to manage the deployment of a satellite network

**Course
Outline**

- Introduction
 - Limitations of terrestrial communication
 - Advantages and disadvantages of satellites
- History
- Commercial Markets and Applications
 - Analog and digital transmission
 - Business applications
 - Radio
 - Television
- Military Markets and Applications
 - GPS
 - Remote sensing
 - DOD tactical & strategic
- Systems
 - Geo, Meo, Leo
 - Mobile satellite systems
- Satellite System Architecture
 - Network configuration: Mesh vs. star
 - Remotes
 - Satellite subsystems
 - Ground station
 - Network management
- Managing a Satellite Project
- Project Schedule
 - Customer questionnaire
 - Site survey
 - Design
 - Ordering process
 - In-factory test
 - Transportation
 - Resources
 - Delays
- Wrap-up: System View
 - Putting it all together
 - Future of satellite communications

**How You Will
Learn**

- A seasoned instructor will present this course in interactive lecture format
- Along with lecture, we use exercises, puzzles, case studies, and interesting group activities to enrich the instruction and drive home the essential points.
- If you already know something about the technology, we will build on that. We'll compare and contrast what's familiar with what's new, making new ideas easier to learn as well as more relevant.
- If your background is less technical, we will use meaningful and ingenious examples and analogies to simplify the complex subject matter.
- You will receive a printed Participant Handbook which will help you remember and retain what you learned in class and apply it on your job.
- You will learn the key concepts of satellite communications from both the theoretical and practical perspectives.

Revised

Oct. 13, 2005