

Course ID

SATSHOP

Course Duration

1 day

Course Title

Satellite Network Design Workshop: VSAT Design, Installation, and Program Management

Related Courses

- Satellite Communications Principals and Design: A-to-Z of Modern Commercial and Military Satellite Systems (SATCOM, 2 days)

Aimed At

The standard presentation of this course assumes a bachelor of science in Electrical Engineering, Mathematics, Physics, or a related subject along with an appropriate background in communications.

Group Size

5-25

Prerequisites

Satellite Communications Principals and Design: A-to-Z of Modern Commercial and Military Satellite Systems (SATCOM, 2 days)

Course in a Nutshell

Designing and deploying a VSAT network offers many challenges. Some of these challenges are technical, some are logistical, and some are simply from the realm of the unexpected. Experience makes the difference!

Through examples and exercise, you will experience how to design and deploy a VSAT satellite network. You will learn everything from eliciting and documenting the customer requirements to developing project plans and schedules. You will undertake a real world case study to select vendors based on the criteria provided. You will learn what to look for in site surveys and how to avoid the mistakes that are commonly made. Finally, you will run through a complete installation process to learn what could go wrong. All in all, a day very well spent!

Customize It!

- *Are you a wireless or satellite engineer* who's familiar with the theory of satellite communications and need to understand the practical issues? Let us know and we will focus on the areas that interest you the most.
- *Are you designing or deploying a military satellite network?* If so, we can incorporate examples drawn from the real world military networks.
- *Are you a manager, executive, or sales person* with responsibility for the management of satellite network deployment? If so, we can emphasize the parts of the course that deal with proposal writing and program management.
- *Combine this course with SATCOM (2 days)*, for a 3-day high-impact course covering both the theoretical and practical issues. Please ask about the "combo discount".

Learn How To

- Learn the step-by-step process for designing and deploying a real world satellite VSAT network.
- Learn how to :
 - elicit and document the customer requirements
 - plan and resource a project
 - design a satellite system

- select the right vendors
- avoid the mistakes commonly made

**Course
Outline**

- Managing a Satellite Project
- Project Schedule
 - Customer questionnaire
 - Site survey
 - Design
 - Ordering process
 - In-factory test
 - Transportation
 - Resources
 - Delays
- Practical Vendor Selection
 - Modems
 - LNA's
 - HPA
 - Antennas
 - Satellite bandwidth
- Installation
 - Site survey
 - Tools
 - Cables
 - Connectors
 - Pointing the VSAT
 - Steerable antennas
 - Look angles
 - Satellite time
- Wrap-up: System View
 - Putting it all together
 - Where things can go wrong

**How You Will
Learn**

- A seasoned instructor will present this course in “workshop” (lecture/practice) format
- You will learn how to deploy a VSAT satellite network through real world examples, exercises, and case studies
- 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.
- Bonus materials: You will also receive Planning Worksheets, Site Survey Forms, Customer Questionnaires, Dos and Don'ts, and other job aids that will help you take what you learned back to your workplace to use on the job!

Revised

Oct 13, 2005