Introduction to Satellite Communications

On-line, interactive training course

Satcom Essentials: Your Information Toolkit

From broadcasting to telecoms and from broadband to narrowband, satellite services and systems are being deployed worldwide at an unprecedented level. GVF is pleased to announce the latest addition to our Satcom Training Academy – an interactive online Introduction to Satellite Communications Course.

Course Objectives

This GVF course is designed for professionals who need a comprehensive overview of the key subject areas relating to the delivery of satellite communications today. Included in the Course curriculum are industry history, launch systems, orbits, frequencies, network topologies, equipment types, bandwidth factors, applications, markets, regulations, industry horizontal and vertical structure, major players by segment, hybrids, and much more. Upon completion, trainees will be equipped with a solid understanding of how the satcom market is structured and the capabilities of the technology that makes it all possible.

Interactive, animated, on-line delivery

Students learn at their own pace using animated, interactive on-line content. Simulation-based animations bring topics to life and engage the student. SatProf on-line courses for GVF have been rated as even more effective than instructor-led classroom sessions.

Who Should Take This Course?

The Introduction to Satellite Communications course is intended to provide a thorough overview to everyone who would benefit from a broad knowledge of industry fundamentals, including sales executives, marketing managers, business leaders, and technical, engineering, operations, quality, and customer service staff.

The GVF Training Program

GVF currently provides a broad range of course content – delivered both online and in classrooms – addressing the information requirements of professionals involved with many aspects of satellite communications: VSAT installers, managers, executives, users, government officials … anyone anywhere in the world who seeks to strengthen his or her grasp of satellite communications will benefit from one or more of GVF’s courses.
Getting started. Using the learning system. Quizzes, exams, and certificates.

Introduction. History of satellite communications. The first satellite. How many satellites are there now? Today's satellite market. The Global VSAT Forum. What will we learn in this course? Terms you should know.


Spacecraft technology. What is a satellite? How big is a satellite? What a satellite needs to function. Payloads. Transponders. Stationkeeping and lifetime.


Horizontal markets. Launch industry: major players in the industry; launch costs; insurance; launch market size; future trends. The spacecraft industry: satellite costs, major industry players, market size and trends. Satellite operators: the major global, regional, and DTH GEO satellite operators; satellite radio (DARS) operators; mobile satellite service operators. Service providers and integrators. Ground equipment market segments, sizes, and trends.


A quiz after each lesson reinforces student knowledge. The course ends with a comprehensive final exam. A GVF certificate of completion is provided to each successful student. All students receive a complete set of course notes in PDF format.