

Satellite Communication Systems & IP in Modern Networks

Manama (Bahrain)

1 - 5 June 2025

UK Training

PARTNER



Satellite Communication Systems & IP in Modern Networks

Code: GC28 From: 1 - 5 June 2025 City: Manama (Bahrain) Fees: 4400 Pound

Introduction

Successful as they are today, satellite systems are on the brink of a revolution. that will doubtless have a significant impact in the not-too-distant future. New and promising technology continues to appear every day. This satellite communications training course covers the most recent advancement in the field of satellite communication systems.

This course enables the participants to learn about updates in the basics of satellite basics and the parts of a satellite. and how to build a communications satellite with the latest updates. also an understanding of the major approaches, including network topologies, VSAT, and IP networking over satellite.

Course Objectives of Satellite Communication Systems & IP in Modern Networks

- Being introduced to satellite communication systems.
- how does satellite communication work?
- Learning about satellite band frequencies.
- Identifying the requirements for an effective IP network, network ID in IP address.
- Examining the potential security risks in AAA.
- Understanding the wireless LAN and Other Access Technology .
- how to check the used IP address in the network.

Satellite Communication Systems & IP in Modern Networks Course Outlines

Day 1

Introduction of Satellite communication systems

- Introduction of Advanced Satellite communication systems, and satellite communication basics.
- Multiple Access Techniques: FDMA, TDMA, CDMA, Random Access.
- All Digital Modulation Techniques.
- Amplitude Shift Keying ASK and Frequency Shift Keying FSK.
- Binary Phase Shift Keying BPSK and Quadrature Phase Shift Keying QPSK.
- Data Rate And Baud Rate.

Day 2

Earth Station Antenna

- Earth Station Antenna types.
- SNG Antennas.
- Fly Away Antennas.
- On the move antenna.



- Maritime Antennas.
- TVRO Antennas.
- Pointing/Tracking.

Day 3

Satellite band frequencies

- Small antennas at the Ku band.
- FCC-Intelsat-ITU antenna requirements and EIRP density limitations.
- Overview of satellite band frequencies.
- The electromagnetic spectrum.
- The radio spectrum.
- Windows to space.
- L-band 1-2 GHz.
- S-band 2-4 GHz.
- C-band 4-8 GHz.
- X-band 8-12 GHz.
- Ku-band 12-18 GHz.
- Ka-band 26-40 GHz.

Day 4

Modern types of modulation in the communication system, satellite communication service

- Overview of modern types of modulation in the communication system.
- Protocol Suite Overview.
- IP and Data Networks.
- IP Network Operation.

Day 5

Potential security risks in AAA & wireless LAN and Other Access Technology

- IP Telephony and VoIP.
- IP in the Mobile Network.
- IPv6.
- DNS.
- DHCP.
- SS7 Functions, Architecture, and the Message Transfer Part.
- Security and AAA.
- Wireless LAN and Other Access Technologies.



Blackbird Training Cities

Europe



Malaga (Spain)



Sarajevo (Bosnia and Herzegovina)



Oporto (Portugal)



Glasgow (Scotland)



Edinburgh (UK)



Oslo (Norway)



Anney (France)



Bordeaux (France)



Copenhagen (Denmark)



Birmingham (UK)



Lyon (France)



Moscow (Russia)



Stockholm (Sweden)
(Netherlands)



Podgorica (Montenegro)



Batumi (Georgia)



London (UK)



Istanbul (Turkey)



Amsterdam



Düsseldorf (Germany)



Paris (France)



Barcelona (Spain)



Munich (Germany)



Geneva (Switzerland)



Prague (Czech)



Vienna (Austria)



Rome (Italy)



Brussels (Belgium)



Madrid (Spain)



Berlin (Germany)



Lisbon (Portugal)



Zurich (Switzerland)



Manchester (UK)



Milan (Italy)



Blackbird Training Cities

USA & Canada



Los Angeles (USA)



Orlando, Florida (USA)



Online



Phoenix, Arizona (USA)



Houston, Texas (USA)



Boston, MA (USA)



Washington (USA)



Miami, Florida (USA)



New York City (USA)



Seattle, Washington (USA)



Washington DC (USA)



In House



Jersey, New Jersey (USA)



Toronto (Canada)

Africa



Baku (Azerbaijan)
(Thailand)



Maldives (Maldives)



Doha (Qatar)



Manila (Philippines)



Bali (Indonesia)



Bangkok



Beijing (China)



Singapore (Singapore)



Sydney (Australia)



Tokyo (Japan)



Jeddah (KSA)



Riyadh (KSA)



Dubai (UAE)



Kuala Lumpur (Malaysia)



Kuwait City (Kuwait)



Pulau Ujong (Singapore)



Jakarta (Indonesia)



Amman (Jordan)



Beirut (Lebanon)



Blackbird Training Cities

Asia



Kigali (Rwanda)



Cape Town (South Africa)



Accra (Ghana)



Lagos (Nigeria)



Marrakesh (Morocco)



Nairobi (Kenya)



Zanzibar (Tanzania)



Tangier (Morocco)



Cairo (Egypt)



Sharm El-Sheikh (Egypt)



Casablanca (Morocco)



Tunis (Tunisia)



Blackbird Training Clients



UK Training
PARTNER



Blackbird Training Categories

Management & Admin

Professional Skills
Finance, Accounting, Budgeting
Media & Public Relations
Project Management
Human Resources
Audit & Quality Assurance
Marketing, Sales, Customer Service
Secretary & Admin
Supply Chain & Logistics
Management & Leadership
Agile and Elevation

Technical Courses

Hospital Management
Public Sector
Special Workshops
Oil & Gas Engineering
Telecom Engineering
IT & IT Engineering
Health & Safety
Law and Contract Management
Customs & Safety
Aviation
C-Suite Training



BLACKBIRD
FOR TRAINING



International House 185 Tower Bridge
Road London SE1 2UF United Kingdom



+44 7401 1773 35
+44 7480 775526



Sales@blackbird-training.com



www.blackbird-training.com

