

SatMaster Pro: Advanced Satellite Link Budget Analysis

Telecom Engineering
Geneva (Switzerland)
06 - 10 Oct 2025

UK Traininig

PARTNER

The background of the slide features a grey and white checkered chessboard. Several chess pieces are visible: a silver pawn on the left, a silver pawn in the center, and a large gold king piece on the right. In the far right, a portion of another silver piece is visible. Overlaid on the chessboard are several concentric, light grey circles that radiate from the center, creating a ripple effect.

SatMaster Pro: Advanced Satellite Link Budget Analysis

Ref: 321453_140123 **Date:** 06 - 10 Oct 2025 **Location:** Geneva (Switzerland) **Fees:** 4700 Euro

Course Description

This intensive 5-day course provides comprehensive training on satellite link budget analysis using SatMaster Pro software. Participants will gain in-depth knowledge of satellite communication systems, link budget calculations, and optimization techniques. The course combines theoretical concepts with hands-on practical exercises to ensure a thorough understanding of satellite engineering principles.

Learning Objectives

- Master the fundamentals of satellite link budget analysis
- Develop proficiency in using SatMaster Pro software for link budget calculations
- Understand advanced concepts in satellite communication system design
- Learn optimization techniques for various satellite network configurations
- Gain practical skills in troubleshooting and improving satellite link performance

Course Modules

Day 1: Introduction to Satellite Link Budgets

- Satellite communication basics and link budget overview
- SatMaster Pro software introduction and interface familiarization
- Key parameters in link budget calculations
- Hands-on exercises: Basic link budget setup

Day 2: Detailed Link Budget Analysis

- Advanced link budget components and calculations
- Propagation effects and atmospheric models
- Modulation and coding techniques
- Practical session: Complex link budget scenarios

Day 3: Satellite Network Design

- VSAT network architecture and design principles
- Transponder loading and optimization
- Interference analysis and mitigation strategies
- Workshop: Designing a multi-beam satellite network

A graphic of a chessboard with several chess pieces, including a king and pawns, arranged on it. The text 'UK Training PARTNER' is overlaid on the image.

UK Training
PARTNER

Day 4: Advanced Topics in Satellite Communications

- Non-GEO satellite systems and link budget considerations
- HTS and multi-spot beam architectures
- Adaptive coding and modulation techniques
- Case study: Optimizing a global satellite network

Day 5: Optimization and Troubleshooting

- Link budget optimization techniques
- Performance analysis and system trade-offs
- Troubleshooting common satellite link issues
- Final project: End-to-end satellite network design and optimization

Practical Wins for Participants

- Ability to independently perform complex link budget analyses using SatMaster Pro
- Skills to optimize satellite network designs for various applications and environments
- Expertise in identifying and resolving satellite communication system issues
- Confidence in making informed decisions for satellite communication projects

Blackbird training cities



Amman (Jordan)



Amsterdam (Netherlands)

Accra (Ghana)

Annecy (France)

Baku (Azerbaijan)

Bali (Indonesia)

Bangkok (Thailand)

Bangkok (Thailand)

Barcelona (Spain)

Batumi (Georgia)

Beijing (China)

Beirut (Lebanon)

Berlin (Germany)

Birmingham (UK)

Bordeaux (France)

Boston, Massachusetts (USA)

Brussels (Belgium)

Cairo (Egypt)

Cape Town (South Africa)

Casablanca (Morocco)

Cascais (Portugal)

Copenhagen (Denmark)

Doha (Qatar)

Dubai (UAE)

Düsseldorf (Germany)

UK Training
PARTNER



Blackbird Training Category



Human Resource



Audit & Quality Assurance



Finance, Accounting, Budgeting



Marketing, Sales, Customer Service



Secretary & Admin



Law and Contract Management



Project Management



IT & IT Engineering



Supply Chain & Logistics



Management & Leadership



Professional Skills



Oil & Gas Engineering



Health & Safety



Telecom Engineering



Hospital Management



Customs & Safety



Aviation



C-Suite Training



Agile and Refinement



Blackbird training Clients



MANNAI Trading
Company WLL,
Qatar



Alumina Corporation
Guinea



Booking.com
Netherlands



Oxfam GB International
Organization,
Yemen



Capital Markets
Authority,
Kuwait



Waltersmith Petroman Oil Limited
Nigeria



Qatar National Bank
(QNB),
Qatar



Qatar Foundation,
Qatar



AFRICAN UNION ADVISORY
BOARD ON CORRUPTION,
Tanzania



KFAS
Kuwait



Reserve Bank of
Malawi,
Malawi



Central Bank of Nigeria
Nigeria



Ministry of Interior
Kingdom of Saudi Arabia
KSA



Mabruk Oil Company
Libya



Saudi Electricity
Company,
KSA



BADAN PENGELOLA
KEUANGAN Haji,
Indonesia



NATO
Italy



ENI CORPORATE
UNIVERSITY,
Italy



Gulf Bank
Kuwait



المؤسسة العامة للتأمينات الاجتماعية
General Organization for Social Insurance
KSA



Defence Space Administration
Nigeria



National Industries
Group (Holding),
Kuwait



Hamad Medical
Corporation,
Qatar



USAID
Pakistan



STC Solutions,
KSA



North Oil company,



EKO Electricity



Oman Broadband



UNITED NATIONS
UN.



Authority for

UK Training
PARTNER



LONDON TRAINING PROVIDER



www.blackbird-training.com



training@blackbird-training.com



+44 7480 775526 / +44 7401 177335