

# **Decision Analysis for Operation & Maintenance Professionals**





## **Decision Analysis for Operation & Maintenance Professionals**

Ref: 321585\_131280 Date: 27 - 31 Jul 2025 Location: Istanbul (Turkey) Fees: 3900 Euro

## **Course Description**

This intensive 5-day course equips operation and maintenance professionals with advanced decision analysis skills. Participants will learn to apply structured decision-making techniques, utilize decision trees, and incorporate risk assessment in their daily operations. The course combines theoretical concepts with practical applications, ensuring immediate value in the workplace.

# **Learning Objectives**

- Apply decision analysis frameworks to complex O&M scenarios
- Construct and interpret decision trees for operational choices
- Integrate risk assessment techniques into maintenance planning
- Utilize probabilistic modeling for equipment reliability analysis
- Implement value of information concepts in maintenance strategies

#### **Course Modules**

#### Day 1: Foundations of Decision Analysis in O&M

- Introduction to decision analysis principles
- Structuring O&M decisions
- Framing problems in maintenance contexts
- Decision quality framework for operations

#### **Day 2: Decision Trees and Probabilistic Modeling**

- Constructing decision trees for maintenance choices
- Probability assessment in operational uncertainties
- Expected value calculations for equipment decisions
- Sensitivity analysis in O&M contexts

#### Day 3: Risk Assessment and Management in O&M

- Risk identification in operational environments
- Quantitative risk analysis techniques
- Risk mitigation strategies for maintenance
- Integrating risk in decision-making processes

## **Day 4: Value of Information in Maintenance Decisions**

Head Office: +44 7480 775 526 | 0 7401 177 335 Email: training@blackbird-training.com Website: www.blackbird-training.com





- Concepts of perfect and imperfect information
- Calculating value of information for maintenance data
- Applying VOI to condition monitoring decisions
- Information gathering strategies in O&M

## **Day 5: Advanced Topics and Practical Applications**

- Multi-criteria decision analysis for O&M
- Group decision-making in operational teams
- Cognitive biases in maintenance decisions
- Case studies and real-world applications

# **Practical Wins for Participants**

- Improved ability to make data-driven maintenance decisions
- Enhanced risk management in daily operations
- Increased efficiency in resource allocation for maintenance
- Better justification of O&M investments to management



Head Office: +44 7480 775 526 | 0 7401 177 335



# Blackbird training cities





Annecy (France)

Baku (Azerbaijan)

Accra (Ghana)

Bali (Indonesia)

Bangkok (Thailand)

Bangkok (Thailand)

Barcelona (Spain)

Batumi (Georgia)

Beijing (China)

Beirut (Lebanon)

Berlin (Germany)

Birmingham (UK)

Bordeax (France)

Boston, Massachusetts (USA)

Brussels (Belgium)

Cairo (Egypt)

Cape Town (South Africa)

Casablanca (Morocco)

Cascais (Portugal)

Copenhagen (Denmark)

Doha (Qatar)

Dubai (UAE)

Düsseldorf (Germany)

Head Office: +44 7480 775 526 | 0 7401 177 335





# **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



Head Office: +44 7480 775 526 | 0 7401 177 335



# **Blackbird training Clients**



MANNAI Trading Company WLL,



Alumina Corporation **Guinea** 



Netherlands



Oxfam GB International Organization, Yemen



Capital Markets Authority, Kuwait



Nigeria





Oatar Foundation, **Qatar** 



AFRICAN UNION ADVISORY BOARD ON CORRUPTION, Tanzania



Kuwait



Reserve Bank of Malawi, **Malawi** 



Central Bank of Nigeria
Nigeria



Ministry of Interior, KSA



Mabruk Oil Company **Libya** 



Saudi Electricity Company,



BADAN PENGELOLA KEUANGAN Haji, Indonesia



NATO **Italy** 



ENI CORPORATE UNIVERSITY, Italy



Kuwait



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



UN.



Head Office: +44 7480 775 526 | 0 7401 177 335





LONDON TRAINING PROVIDER

