

Safety Technology & Risk Management

Geneva (Switzerland) 13 - 17 April 2026



www.blackbird-training.com -



Safety Technology & Risk Management

Code: HS28 From: 13 - 17 April 2026 City: Geneva (Switzerland) Fees: 5400 Pound

Introduction

As technological systems grow more complex, identifying safety hazards and controlling their impact becomes increasingly challenging. Plant managers and engineers are realizing that safety technology and risk management are critical to the smooth operation of engineering and process systems. To meet the ever-evolving international and national safety standards, organizations must proactively address safety risks while maintaining compliance and operational efficiency.

Unsafe systems can result in significant losses, including financial damages due to accidents, production disruptions, legal liabilities, loss of market share, and environmental harm. This course is designed to equip participants with the knowledge and tools to leverage advanced safety technologies and improve risk management strategies.

Course Objectives

By the end of this course, participants will:

- Apply principles of hazard identification and risk assessment to processes and equipment.
- Understand the concept of reliability and implement failure tracing methods.
- Gain a practical understanding of quantitative risk assessment techniques and recordkeeping.
- Provide management with actionable advice on effective risk control strategies.
- Develop safe systems of work that meet international safety standards.
- Identify key safety technologies to reduce risks and improve operational efficiency.
- Promote a proactive approach to hazard analysis and risk mitigation.
- Stay informed on the role of safety and security technology in compliance and risk management.

Course Outlines

Day 1: Hazard Identification

- Why is safety engineering necessary?
- Case studies of major industrial disasters.
- Overview of safety technology systems.
- Techniques for hazard identification and control.
- · Criteria for risk tolerability.
- Role of Safety Technology International standards in system design.
- Analysis of safety in chemical and manufacturing processes.

Day 2: Risk Assessment Techniques





- Fundamentals of safety management.
- The safety lifecycle of engineering systems.
- Task-based and equipment-based risk assessment.
- Introduction to HAZOP Hazard and Operability Studies.
- Understanding information technology risk management in safety operations.

Day 3: Machinery and Work Equipment Safety

- · Identifying and mitigating machinery hazards.
- · Preventing accidents through advanced safety technology tips.
- Examples of HAZOP applications.
- Conducting Failure Mode and Effects Analysis FMEA.
- · Addressing human factors and safety analysis to minimize error.

Day 4: Reliability Technology

- Types and causes of system failures.
- Approaches to failure prevention.
- Overview of technology safety rules for equipment maintenance.
- Ensuring reliability in protective systems and controls.
- Role of Safety Integrity Levels SIL in risk management.

Day 5: Consequence Analysis

- Mechanics of fires, explosions, and toxic releases.
- · Using dispersion modeling software to assess risks.
- Types of fires and explosions, such as BLEVE and cascading fires.
- Quantitative Risk Assessment QRA and Event Tree Analysis ETA.

Why Attend this Course? Wins & Losses!

- Enhanced Safety through Technology: Learn how to integrate advanced safety technology into your processes and ensure compliance with Safety Technology International standards.
- Improved Risk Management: Gain expertise in managing technology-related risks and develop strategies for effective risk and compliance management.
- Practical Insights: Apply tools like HAZOP, FMEA, and ETA to identify and mitigate safety risks in real-world scenarios.
- Global Standards Compliance: Stay aligned with international safety and reliability standards, reducing legal and operational risks.
- Future-Proof Your Systems: Utilize public safety information technology to adapt to emerging trends in safety and risk management.

Conclusion

The Advanced Safety Technology and Risk Management in Engineering Systems course is your gateway to mastering safety technology, risk assessment, and compliance management. You will gain the knowledge and tools to proactively manage risks, ensure the safety of your systems, and align with global safety standards.

Register now to become a leader in leveraging technology for safety and risk management. Equip yourself with the





skills to protect your organization assets, people, and reputation while fostering a culture of safety and innovation.





Blackbird Training Cities

Europe



Malaga (Spain)



Sarajevo (Bosnia and Herzegovarsa)ais (Portugal)





Glasgow (Scotland)



Edinburgh (UK)



Oslo (Norway)



Annecy (France)



Bordeax (France)



Copenhagen (Denmark)



Birmingham (UK)



Lyon (France)



Moscow (Russia)



Stockholm (Sweden)



Podgorica (Montenegro)



Batumi (Georgia)



London (UK)



Istanbul (Turkey)



Amsterdam



Düsseldorf (Germany) (Switzerland)



Paris (France)



Athens(Greece)



Barcelona (Spain)



Munich (Germany)



Geneva



Prague (Czech)



Vienna (Austria)



Rome (Italy)



Brussels



Madrid (Spain)



Berlin (Germany)



Lisbon (Portugal)



Zurich



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)

ASIA



Baku (Azerbaijan) (Thailand)



Maldives (Maldives)



Doha (Qatar)



Manila (Philippines)



Bali (Indonesia)



Bangkok



Beijing (China)



Singapore (Singapore)



Sydney



Tokyo (Japan)



Jeddah (KSA)



Riyadh(KSA)



Melbourne (Australia) Korea)



Phuket (Thailand)



Dubai (UAE)



Kuala Lumpur (Malaysia)



Kuwait City (Kuwait)



Seoul (South



Pulau Ujong (Singapore)



Irbid (Jordan)



Jakarta (Indonesia)



Amman (Jordan)



Beirut





Blackbird Training Cities

AFRICA



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



MANNAI Trading
Company WLL,
Qatar



Alumina Corporation **Guinea**



Booking.com Netherlands



Oxfam GB International Organization, Yemen



Capital Markets Authority, **Kuwait**



Itersmith Petroman Oil Limited Oato





dation, AFRICAN BOARD



AFRICAN UNION ADVISORY BOARD ON CORRUPTION, Tanzania



KFAS **Kuwait**



Reserve Bank of Malawi, **Malawi**



Central Bank of Nigeria



Ministry of Interior, KSA



Mabruk Oil Company **Libya**



Saudi Electricity Company,



BADAN PENGELOLA KEUANGAN Haji, Indonesia



NATO **Italy**



ENI CORPORATE UNIVERSITY, Italy



Gulf Bank 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.







Blackbird Training Categories

Management & Admin

Entertainment & Leisure

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

Artificial Intelligence (AI)

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











