Scandinavian Academy

for Training and Development AB

Course: Artificial Intelligence for Risk and Fraud Detection

Code	City	Hotel	Start	End	Price	Language - Hours
DAI-897	Brussels (Belgium)	Hotel Meeting Room	2026-01-26	2026-01-30	5950 €	En - 25

Introduction:

With the rising sophistication of cyber threats and fraudulent schemes, artificial intelligence (AI) has emerged as a vital tool in modern risk and fraud detection. This course provides professionals with a practical and strategic understanding of how AI and machine learning can be leveraged to detect anomalies, predict threats, and strengthen organizational defenses — while navigating compliance, ethics, and future risks.

General Objective:

To enable professionals to design, implement, and manage AI-powered systems for detecting and mitigating fraud and security threats, while ensuring governance, ethical use, and strategic alignment.

Objectives:

- Understand the fundamentals of AI and its role in security, risk, and fraud detection.
- Design and integrate AI-based detection models into existing security systems.
- Apply advanced analytics to detect behavioral and transactional anomalies.
- Identify vulnerabilities in AI systems and develop appropriate defense strategies.
- Ensure ethical, legal, and regulatory compliance of AI-powered solutions.
- Plan for emerging threats and build a forward-looking AI security strategy.

Target Audience :

- Risk and Compliance Officers
- Fraud Detection Analysts
- Cybersecurity Specialists
- Chief Security Officers (CSOs)
- IT Security Managers
- Data Scientists in Security Roles
- Internal Auditors and Forensics Professionals
- AI and Machine Learning Engineers
- Governance and Regulatory Advisors
- Financial Crime Investigators

Course Outline

Day 1: Foundations of AI in Risk and Fraud Detection

- Overview of AI and machine learning in security contexts
- Core concepts and key algorithms for risk detection
- Types of AI models used in security applications
- System limitations and known blind spots
- Evolution of fraud tactics and AI-enabled social engineering
- Threat modeling using AI-informed frameworks

Day 2: Implementation and Integration

- Data preparation: quality, completeness, and relevance
- Selecting and training AI models for detection
- Integrating AI systems into existing infrastructure
- Performance metrics: precision, recall, false positives
- System vulnerabilities: attack vectors against AI
- Adversarial attacks: model poisoning, data manipulation

- Defending AI systems: resilience and robustness best practices

Day 3: Advanced Detection Techniques

- Pattern recognition and anomaly detection methods
- Behavioral analytics for user and system monitoring
- Network traffic analysis and forensic tracing
- Real-time transaction monitoring and alerting
- Feature engineering for fraud detection
- Deepfake detection techniques
- Detecting AI-based social engineering attacks
- Cryptocurrency and blockchain-related fraud

Day 4: Governance and Compliance

- Overview of global regulatory frameworks (GDPR, CCPA, etc.)
- Auditing AI systems and maintaining documentation
- Reporting obligations and compliance strategies
- Legal risks and accountability in AI deployment
- Ethics in AI: data privacy, consent, and fairness
- Addressing bias and discrimination in models
- Ensuring transparency and explainability
- Developing organizational AI ethics guidelines

Day 5: Future-Proofing and Strategic Planning

- Upcoming technologies and threat evolutions
- Quantum computing and its impact on security
- Advanced persistent threats (APTs) and zero-day AI attacks
- AI's future role in integrated security architecture

The Scandinavian Academy for Training and Development adopts the latest scientific and professional methodologies in training and human resource development, aiming to enhance the efficiency of individuals and organizations. Training programs are delivered through a comprehensive approach that includes:

- Theoretical lectures supported by PowerPoint presentations and visual materials (videos and short films).
- Scientific evaluation of participants before and after the program to measure progress and knowledge acquisition.
- Brainstorming sessions and practical role-playing to simulate real-life scenarios.
- Case studies tailored to align with the training content and participants work nature.
- Assessment tests conducted at the end of the program to evaluate the achievement of training objectives.

Each participant receives the training material (both theoretical and practical) in printed form and saved on a CD or flash drive. Detailed reports, including attendance records, final results, and overall program evaluations, are also provided.

Training materials are prepared professionally by a team of experts and specialists in various fields. At the end of the program, participants are awarded a professional attendance certificate, signed and accredited by the Scandinavian Academy for Training and Development.

Program Timings:

- 9:00 AM to 2:00 PM in Arab cities.
- 10:00 AM to 3:00 PM in European and Asian cities.

The program includes:

- A daily buffet provided during the sessions to ensure participants comfort.