Risk and AI (RAI) Certificate Training Course

Professional Development Training Course Outline

Category	Risk Management	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

The rapidly accelerating integration of Artificial Intelligence (AI) across global industries necessitates a specialized and sophisticated approach to Risk Management. Risk and AI (RAI) Certificate Training Course is designed to equip professionals with the essential knowledge and Governance frameworks required to navigate this complex landscape. Organizations are leveraging AI for everything from Predictive Analytics and Automated Decision-Making to Generative AI applications, but without robust oversight, these innovations introduce new, significant vulnerabilities like Algorithmic Bias, Model Risk, and complex Cybersecurity challenges. This program offers a critical, industry-recognized pathway for developing the expertise to design, implement, and govern Safe and Trustworthy AI Systems.

This certificate program directly addresses the urgent demand for professionals capable of bridging the technical intricacies of Machine Learning (ML) with the practical requirements of Enterprise Risk Management (ERM) and Regulatory Compliance. It provides a comprehensive understanding of the entire AI Lifecycle, from data ingestion to model deployment, focusing on how to establish strong Data Governance and ethical standards. By mastering concepts like Explainable AI (XAI), AI Model Validation, and emerging AI Safety frameworks, participants will become key strategic assets, empowered to mitigate risks, ensure Ethical AI Deployment, and drive responsible Digital Transformation within their organizations.

Programme Curriculum

Risk and AI (RAI) Certificate Training Course

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Course Duration

5 days

Course Objectives

1. Master the principles of Responsible AI and Ethical AI frameworks for deployment.
2. Design and implement robust AI Governance and oversight structures.
3. Evaluate and mitigate Algorithmic Bias and fairness challenges in ML models.
4. Apply Explainable AI (XAI) techniques to ensure model transparency and interpretability.
5. Conduct comprehensive AI Risk Assessments across the entire AI/ML lifecycle.
6. Develop effective Model Risk Management (MRM) strategies for complex deep learning systems.
7. Analyze the Data Governance implications of large-scale AI data usage, including synthetic data.
8. Identify and defend against AI Security threats and vulnerabilities
9. Ensure Regulatory Compliance with emerging global standards like the EU AI Act and NIST AI RMF.
10. Integrate AI into existing Enterprise Risk Management (ERM) and business resilience frameworks.
11. Understand the unique risks and applications of Generative AI and Large Language Models (LLMs).
12. Formulate strategies for continuous AI Model Monitoring and drift detection in production.
13. Leverage AI tools for Enhanced Fraud Detection and advanced Predictive Analytics in risk functions.

Target Audience

1. Risk Managers and Analysts
2. Data Scientists and Machine Learning Engineers
3. Compliance Officers and Regulatory Professionals
4. Internal Auditors and Technology Auditors
5. C-Suite Executives and Business Strategists
6. Model Developers and Validation Specialists
7. Information Security and Cybersecurity Professionals
8. Legal Counsel specializing in data privacy and technology law

Course Modules

Module 1: AI Fundamentals and the Risk Landscape

- Overview of Artificial Intelligence and Machine Learning concepts.
- The AI Lifecycle and its risk touchpoints.
- Introduction to Model Risk and systemic AI-related threats.

- Case Study: The use of AI in credit scoring and the risk of perpetuating historical bias in lending decisions.
- Core concepts of Generative AI and its new risk vectors

Module 2: Data Governance and Data-Centric Risks

- Principles of Data Quality, privacy, and lifecycle management.
- Data Bias identification and mitigation strategies.
- GDPR, CCPA, and their impact on AI data use.
- Case Study: Analyzing a financial institution's use of customer data for fraud detection and ensuring compliance with data privacy regulations.
- Synthetic data generation and its associated risks for model training.

Module 3: Algorithmic Bias and Fairness

- Defining and quantifying Algorithmic Bias
- Metrics and tools for Fairness testing and auditing.
- Techniques for pre-, in- and post-processing bias mitigation.
- Case Study: The deployment of an AI-powered hiring tool that exhibits gender bias, leading to legal and reputational damage.
- The socio-technical implications of AI-driven unequal outcomes.

Module 4: Model Validation and Performance Monitoring

- Advanced Model Validation methodologies for complex ML models.
- Detecting Model Drift, decay, and performance anomalies in real-time.
- Stress testing and scenario analysis for AI systems.
- Case Study: Monitoring a market-risk model's performance during an unexpected financial shock and identifying model decay.
- Establishing robust challenger model frameworks.

Module 5: Explainable AI (XAI) and Interpretability

- The need for Transparency and Interpretability in high-stakes AI.
- Local and global XAI techniques
- Communicating model results to non-technical stakeholders and regulators.
- Case Study: A medical diagnostic AI system whose lack of XAI prevents doctors from trusting its crucial, life-affecting recommendations.
- Interpreting deep learning and Large Language Models

Module 6: AI Governance and Oversight Frameworks

- Designing an effective AI Governance structure
- Implementing the NIST AI Risk Management Framework and other global standards.
- Establishing an Ethics Committee and clear lines of accountability.
- Case Study: Developing a formal governance policy for an organization's first major AI deployment in a critical business function
- Policy drafting for the responsible use of Generative AI in the enterprise.

Module 7: AI Security and Cyber Threats

- Threat taxonomy for AI systems.

- Security-by-design principles for the AI lifecycle.
- Integrating AI risk into the broader Cybersecurity and information security program.
- Case Study: An organization's Machine Learning model being compromised by a targeted adversarial example attack to bypass a security filter.
- Securing Prompt Engineering and LLM integration points.

Module 8: Ethical AI Deployment and Future Trends

- Advanced topics in AI Safety, robustness, and societal impact.
- Future of Regulation
- Sustainable AI and environmental considerations.
- Case Study: Navigating the ethical dilemma of deploying an AI surveillance system while balancing security needs against civil liberties and public trust.
- Quantum computing impact on AI and the rise of Agentic AI workflows.

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call +254769199797

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

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