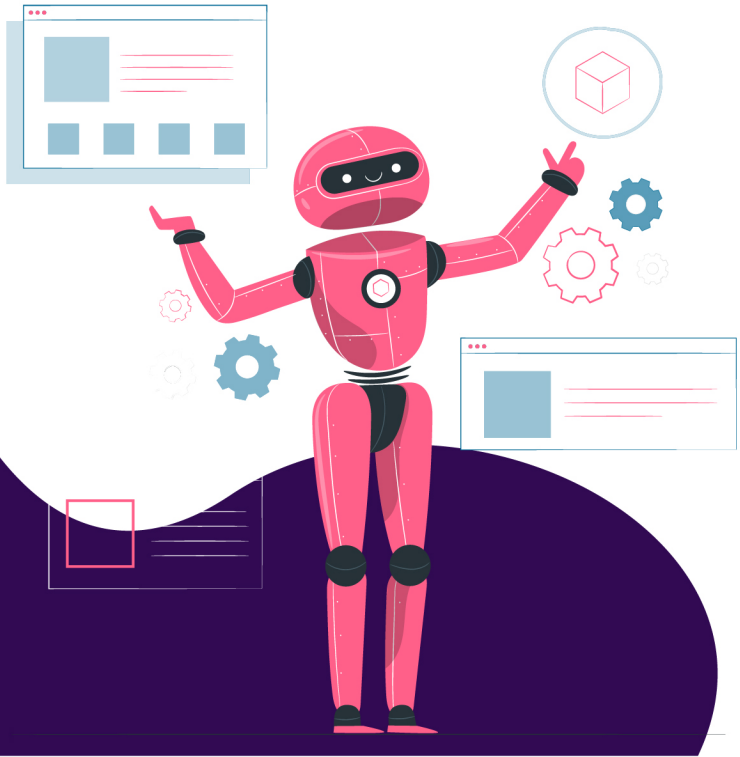
AI RISK MANAGEMENT

PROFESSIONAL CERTIFICATION



AIRMPC™ Version 032024

CertiProf®

AI Risk Management

Syllabus V032024

Introduction

The AI Risk Management Professional Certification, based on the NIST AI Risk Management Framework, is designed for professionals involved in the development, deployment, or management of AI systems. This certification provides comprehensive education and validation of skills in identifying, assessing, and mitigating risks associated with AI technologies, ensuring they align with ethical and social values.

Learning objectives

1. Understand the fundamentals of AI risk management:

- Define the key concepts and components of AI risk management.
- Explain the purpose and importance of the NIST IA Risk Management Framework.

2. Identify the risks of AI:

- Recognize potential risks and vulnerabilities in AI systems.
- Differentiate between various types of AI risks, such as ethical, operational, and technical.

3. Assess and measure AI risks:

- Apply methods to assess the likelihood and impact of AI-related risks.
- Use tools and metrics to measure the potential risks and benefits of AI systems.

4. Implement AI risk mitigation strategies:

- Develop strategies to mitigate and manage the risks identified in AI systems.
- Align IA risk mitigation strategies with organizational objectives and regulatory requirements.

5. Governing AI systems:

- Establish governance mechanisms to oversee IA systems and manage risks effectively.
- Ensure continuous compliance with ethical standards and social expectations.

6. Improve AI reliability:

- Apply best practices to increase transparency, accountability, and fairness of IA systems.
- Identify ways to improve the reliability of AI technologies.

7. Apply the RMF of IA in various contexts:

- Adapt the IA RMF to different industry sectors and use cases.
- Evaluate case studies to understand the practical application of the AI RMF in real-world scenarios.

8. Communicate the risks of AI:

- Develop skills to effectively communicate IA risks and mitigation strategies to stakeholders.
- Create documentation and reports that clearly articulate IA risk assessments and management plans.

Target Audience

1. AI developers:

- Professionals who design, build, and maintain AI systems. This certification helps them understand and address potential risks in their AI applications.

2. Data scientists:

- Experts who analyze and interpret complex data. This certification helps them identify and mitigate risks related to data quality, bias, and privacy in AI systems.

3. Cybersecurity professionals:

- Specialists focused on protecting systems and data from cyber threats. This certification provides them with the essential knowledge to manage the security risks associated with AI technologies.

4. Risk managers:

- Individuals responsible for assessing and mitigating risks within an organization. This certification improves their ability to effectively identify and manage AI-related risks.

5. Auditors:

- Professionals who review and evaluate organizational processes and systems. This certification provides them with the knowledge to audit AI systems for compliance with ethical and regulatory standards.

6. Consultants:

- Experts who advise organizations on technology and risk management strategies. This certification enhances their ability to provide informed guidance on AI risk management and implementation of best practices.

7. IT Directors:

- Leaders who oversee IT teams and infrastructure. This certification helps them align AI technologies with organizational goals and manage associated risks.

8. Business analysts:

- Individuals who analyze business needs and recommend solutions. This certification enables them to understand the impact of AI risks on business processes and recommend appropriate mitigations.

9. Project managers:

- Professionals who oversee projects, including AI-related initiatives. This certification provides them with the skills to manage AI risks and ensure successful project outcomes.

10. Ethics officers:

- Individuals responsible for ensuring ethical practices within an organization. This certification helps them address ethical considerations in the development and implementation of AI.

Prerequisites

- No prior knowledge is required and it is suitable for any area of development.

Training

- Type of course: Fundamentals
- Certification code: AIRMPC
- Expiration date: 3 years

Certification Exam

- Format: Multiple Choice
- Questions: 40
- Language: English
- Passing score: 80%.
- Duration: 60 minutes
- Open book: No
- Delivery: This exam is available online

Content

1. Part 1: Fundamental Information

- Key Attributes of the AI Risk Management Framework (AI RMF)
- Framing Risk
- Audience
- AI and Reliability Risks
- AI RMF Effectiveness

2. Part 2: Core and Profiles

- RMF IA Core
- RMF IA Profiles

3. Part 3: Information attached to the AI RFM

- AI Actor Task Descriptions
- How AI Risks Differ from Traditional Software Risks
- AI Risk Management and Human-AI Interaction