



Technical AI Governance Essentials - Foundations

Course description

Learn how to establish the foundational architecture, governance platforms, and operational models required to govern AI systems at scale. Explore governance-by-design principles, technical governance frameworks, platform integration strategies, and approaches for embedding governance into AI systems while enabling innovation, compliance, and operational excellence.

Participants will learn how to build governance-by-design architectures, create governance platforms, integrate governance across enterprise environments, and implement scalable governance strategies that support innovation while maintaining security, compliance, and trust. Through discussions, exercises, and real-world scenarios, learners will gain practical knowledge for designing and operationalizing AI governance frameworks within their organizations.

- Course level: Introductory
- Duration: 1 day

Activities

This course includes instructor-led training, interactive discussions, governance workshops, scenario-based learning, architecture reviews, tabletop exercises, knowledge checks and quizzes, and best practice discussions to reinforce learning.

Course objectives

In this course, you will learn to:

- Explain the holistic approach and principles of AI governance.
- Understand governance-by-design concepts.
- Design foundational AI governance architectures.
- Establish governance platforms for AI systems.
- Implement governance across organizational scales.
- Integrate governance controls into technical environments.
- Measure governance effectiveness and performance.
- Support secure and compliant AI operations.
- Build scalable governance foundations for enterprise AI initiatives.

Intended audience

This course is intended for:

- Data Scientists
- MLOps Engineers
- Data Engineers
- Cloud Security Architects
- Technical Leads
- Software Engineers
- Solution Architects
- Security Professionals
- AI Platform Engineers

Prerequisites

We recommend that attendees of this course have:

- Any technical background.
- Experience implementing production systems is beneficial.
- Software engineering experience is helpful.
- Solution architecture knowledge is recommended.

- Security and compliance awareness is advantageous.

Products covered

- AI Governance Frameworks
- Governance Platforms
- Enterprise AI Infrastructure
- AI/ML Operational Environments
- Security and Compliance Controls

Course outline

Module 00 - The AI Governance Imperative: What, How, and Why Now?

- AI Governance Fundamentals
- Governance Principles
- Key Governance Considerations
- Governance Drivers and Challenges
- Governance and Innovation Balance

Module 01 - Set Up Infrastructure: Build the Governance Platform

- Governance-by-Design Architecture
- Governance Platform Components
- Technical Governance Controls
- Governance Infrastructure Patterns
- Governance Enablement Technologies

Module 02 - Integrate: Unify the Governance Platform

- Governance Across Organizational Scales
- Enterprise Governance Integration
- Governance Performance Measurement
- Governance Operating Models
- Governance Incident Management

Certification details

Participants receive a course completion certificate upon successfully attending the training program.

FAQs

Who should attend this course?

This course is designed for technical professionals responsible for designing, building, securing, and managing AI systems and infrastructure.

Is prior AI governance experience required?

No. The course introduces AI governance concepts and focuses on foundational governance capabilities.

What is governance-by-design?

Governance-by-design is the practice of embedding governance, compliance, security, and risk management controls directly into AI systems and platforms from the beginning of the development lifecycle.

Is this a technical course?

Yes. The course is designed for technical practitioners and focuses on architecture, governance platforms, and operational implementation.

Does the course cover compliance and risk management?

Yes. Governance, risk management, security controls, and compliance considerations are key components of the course.

Are there practical exercises?

Yes. Participants engage in discussions, quizzes, governance workshops, and a tabletop exercise involving a corrupted data incident.

How long is the course?

The course is delivered in a 3-hour instructor-led format.

What business benefits can organizations expect?

Organizations can establish scalable AI governance foundations, improve compliance, reduce risk, increase trust in AI systems, and accelerate responsible AI adoption across the enterprise