



# SYLLABUS

## Course Title: Algorithmic Governance for Managers

### Course Description:

This online course equips managers with a comprehensive understanding of algorithmic governance principles.

Participants will delve into the intricate interplay between technology and decision-making processes within modern organizations.

The course imparts knowledge on designing, implementing, and overseeing algorithmic systems, emphasizing transparency, accountability, and ethical considerations.

By the course's conclusion, participants will be adept at navigating the challenges and opportunities associated with algorithmic governance in their managerial roles, fostering informed and responsible decision-making.

### Course Objectives:

By the end of this course, participants will be able to:

- Understand the principles and methodologies behind algorithmic governance in business contexts.
- Analyze the potential benefits and challenges of implementing algorithmic governance.
- Apply knowledge of data-driven governance, AI, ML, and computational decision-making to real-world business scenarios.
- Evaluate the role of dynamic ecosystems in the realm of algorithmic governance.

### Key Topics:

#### 1. Introduction to Algorithmic Governance

- Definition and Evolution
- Importance in Modern Business

#### 2. Data-Driven Governance

- Principles of Data-Driven Decision Making
- Tools and Techniques
- Benefits and Limitations

#### 3. Artificial Intelligence and Machine Learning in Governance

- Basics of AI and ML for Decision Making
- Predictive Analytics and Proactive Governance
- Ethical Considerations

#### 4. Automated Resource Management

- Principles of Automation in Resource Allocation
- Tools for Automated Resource Management



- Challenges in Automation
- 5. Computational Decision-Making
  - Algorithmic Decision Trees and Logic
  - Computational Models for Business Scenarios
  - Limitations of Computational Decision-Making
- 7. Challenges and Opportunities in Algorithmic Governance
  - Ethical, Social, and Business Challenges
  - Future Trends and Opportunities

### Course Materials:

Course Slides

### Proposed Assessment:

1. **Quizzes (25% of final grade)**
  - Objective: Test participants' understanding of topics.
  - Format: Multiple-choice, true/false, and short-answer questions.
2. **Group Discussions (25% of final grade)**
  - Objective: Encourage collaborative learning and exchange of diverse perspectives.
  - Format: Online discussion forums with weekly prompts related to key topics.
  - Assessment: Participants will be graded on the quality of their contributions and engagement with peers.
3. **Final Project (50% of final grade)**
  - Objective: Participants will design an algorithmic governance model for a chosen business or industry.
  - Format: Written report detailing the model, its benefits, challenges, and potential impact.
  - Assessment: Projects will be graded on feasibility, depth of understanding, and creativity.