

IT Governance and Information Systems Audit According to COBIT and ISO

About the course:

This intensive **7-day course** is designed for **AI managers and senior IT professionals** seeking to enhance their understanding of IT governance and information systems auditing. The course provides an in-depth exploration of **COBIT, ISO 27001, ISO 38500**, and other relevant frameworks, equipping participants with the skills to align IT governance with business strategy, cybersecurity, and regulatory compliance.

Key Areas Covered:

- Foundations of IT governance and audit principles
- COBIT governance framework and its applications
- ISO standards for IT governance and information security
- IT audit frameworks, methodologies, and risk-based auditing
- IT risk management, cybersecurity, and regulatory compliance
- IT governance implementation, best practices, and maturity models
- Advanced IT governance techniques and real-world applications

Through **case studies and interactive exercises**, participants will gain practical insights into IT governance implementation, auditing, and risk management strategies. The program concludes with an **integrated case study** to validate their expertise.

Course Duration: 7 Days (7hrs per day)

Audience: AI Managers and Senior IT Professionals

Day 1: Foundations of IT Governance and Information Systems Audit

- Introduction to IT Governance and Its Importance
- Key IT Governance Models and Frameworks (COBIT, ISO, NIST)
- Role of IT Governance in AI and Digital Transformation
- Understanding the Relationship Between IT Governance and Business Strategy
- IT Compliance, Regulations, and Legal Considerations
- Introduction to IT Auditing and Assurance Principles
- Case Study: Real-World IT Governance Failures and Lessons Learned

Day 2: Understanding COBIT Framework for IT Governance

- Overview of COBIT Framework and Evolution (COBIT 5 vs. COBIT 2019)
- COBIT Governance and Management Objectives
- COBIT Performance Management and Maturity Models
- Enterprise Risk Management and IT Governance Using COBIT
- Aligning AI Governance with COBIT Principles
- Mapping COBIT Controls to IT Operations and Cybersecurity
- Workshop: Implementing COBIT in an AI-Driven Enterprise

Day 3: ISO Standards for IT Governance and Information Security

- Introduction to ISO 27001, ISO 38500, and Related Standards
- Building an Information Security Management System (ISMS)

- Risk Management and Control Implementation in ISO 27001
- ISO 38500: Principles and Best Practices for IT Governance
- Integrating COBIT and ISO Standards for a Comprehensive Governance Approach
- Compliance Audits for ISO Standards in IT Organizations
- Case Study: Implementing ISO 27001 and ISO 38500 in an AI-Driven Organization

Day 4: IT Auditing Frameworks and Methodologies

- Understanding IT Audit Processes and Risk-Based Auditing
- Types of IT Audits: Compliance, Operational, Security, and AI-Specific Audits
- IT Audit Planning, Scope Definition, and Execution
- Evaluating IT Controls and Risk Assessment Methodologies
- IT Audit Reporting, Documentation, and Remediation Strategies
- Automating IT Audits Using AI and Machine Learning
- Practical Exercise: Conducting an IT Audit Based on COBIT and ISO

Day 5: IT Risk Management and Cybersecurity in Governance

- Risk Management Frameworks (NIST, COSO, FAIR) and Their Relevance to AI Governance
- Cybersecurity Threats and Their Impact on IT Governance
- Incident Response, IT Forensics, and Security Compliance
- Data Privacy and Protection Standards (GDPR, HIPAA, CCPA)
- AI Risk and Bias Management in IT Governance
- Cyber Resilience, Disaster Recovery, and Business Continuity Planning
- Workshop: IT Risk Assessment and Mitigation Planning

Day 6: IT Governance Implementation, Maturity Models, and Best Practices

- Developing and Implementing IT Governance Policies and Procedures
- COBIT-Based IT Governance Maturity Models and Continuous Improvement
- Stakeholder Roles and Responsibilities in IT Governance
- Governance Challenges in AI and Emerging Technologies
- Measuring IT Governance Performance and KPIs
- Aligning IT Governance With Enterprise Strategic Goals
- Case Study: Effective IT Governance Implementation in Large Enterprises

Day 7: Advanced IT Governance Techniques and Real-World Applications

- Emerging Trends in IT Governance, AI Regulation, and Cyber Risk Management
- The Role of AI in IT Governance Automation and Decision-Making
- Managing IT Control Failures, Crisis Response, and Incident Handling
- Lessons from High-Profile IT Security Breaches and Governance Failures
- Enterprise-Wide IT Governance Strategy and AI Compliance Best Practices
- Final Case Study: Integrated IT Governance and IT Auditing in AI Enterprises
- Course Review, Certification Exam Preparation, and Q&A

Course Outcomes

Upon completing this course, participants will be able to:

1. **Understand and Apply IT Governance Frameworks**
 - Gain a deep understanding of COBIT, ISO 27001, ISO 38500, and their role in IT governance.
 - Align IT governance strategies with business objectives and regulatory requirements.
2. **Implement Effective IT Auditing Practices**
 - Conduct risk-based IT audits, evaluate IT controls, and ensure compliance.
 - Utilize COBIT and ISO standards to assess IT operations, cybersecurity, and risk management.
3. **Strengthen Cybersecurity and IT Risk Management**
 - Identify and mitigate cybersecurity threats, ensuring compliance with GDPR, HIPAA, and CCPA.
 - Implement incident response, disaster recovery, and AI risk management strategies.
4. **Develop and Improve IT Governance Maturity**
 - Establish IT governance policies, stakeholder responsibilities, and performance measurement KPIs.
 - Utilize COBIT-based maturity models for continuous IT governance improvement.
5. **Leverage AI in IT Governance and Auditing**
 - Automate IT governance and auditing processes using AI and machine learning.
 - Address AI-specific risks, bias management, and regulatory compliance in IT governance.
6. **Apply Real-World IT Governance Solutions**
 - Analyze case studies of IT governance successes and failures.
 - Develop enterprise-wide governance strategies to enhance IT resilience and business continuity.

This course empowers IT leaders with **practical tools and frameworks** to **strengthen governance, enhance compliance, and improve cybersecurity resilience** in AI-driven enterprises.
