



ISO/IEC 42001 AI Management System | Auditor & Implementer Training Course

12 – 16 September 2027
Muscat

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Overview

Organizations adopting artificial intelligence must establish structured governance, risk controls, and accountability mechanisms to ensure responsible deployment. The ISO/IEC 42001 AI Management System standard establishes the international requirements for creating, implementing, maintaining, and auditing an Artificial Intelligence Management System AIMS. This programme prepares professionals to establish robust operational policies, execute AI risk assessments, conduct internal audits, and guide organizations toward formal certification readiness. Participants evaluate control objectives, inspect data integrity and model transparency, and resolve audit nonconformities systematically. This course is delivered by Agile Leaders Training Center.

Who Should Attend

- AI compliance officers and regulatory specialists managing governance programs.
- Internal auditors and quality assurance assessors evaluating AI system controls.
- IT risk managers and cybersecurity analysts identifying operational AI vulnerabilities.
- Project managers and enterprise architects overseeing AI model deployment.
- Data governance professionals and corporate ethics officers responsible for algorithmic accountability.
- Senior technology leaders preparing institutional frameworks for external certification audits.

Departments and Industries

This course supports compliance, risk, and technical personnel across sectors implementing automated decision-making and machine learning workflows.

- AI Governance, Enterprise Risk Management, and Legal Compliance Units
- Information Security, Cybersecurity, and IT Infrastructure Divisions
- Internal Audit and Operational Quality Assurance Teams
- Software Engineering and Machine Learning Development Groups
- Banking, Financial Services, and Insurance Institutions
- Healthcare, Pharmaceutical Research, and Medical Technology Providers
- Manufacturing, Automotive, and Automated Logistics Enterprises

Learning Objectives

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



- Interpret ISO/IEC 42001 requirements and establish an Artificial Intelligence Management System framework.
- Conduct structured AI risk assessment workflows and formulate effective risk treatment plans.
- Execute internal AI compliance audits in accordance with standard auditing principles.
- Deploy operational controls governing AI data quality, transparency, and model lifecycle management.
- Identify nonconformities and implement corrective action programs to address audit findings.
- Prepare organizational documentation and evidence registers for formal certification audits.

Course Agenda

Day 1: Foundations of AIMS and Standard Requirements

- Structure and Intent of the ISO/IEC 42001 AI Management System Standard
- Core Concepts of Artificial Intelligence Management Systems AIMS
- Organizational Context Analysis and Stakeholder Expectation Mapping
- Leadership Accountability and AI Management Policy Formulation
- Establishing AIMS Objectives and Operational Scopes across Business Units
- Overview of Annex Control Objectives and Governance Requirements

Day 2: Implementation Planning and Risk Management

- Developing an AIMS Implementation Roadmap and Work Breakdown Structure
- AI Risk Assessment Methodologies and Consequence Classification
- Conducting Systemic AI Impact Assessments across Operational Workflows
- Selecting and Tailoring Controls for Model Fairness, Transparency, and Safety
- Documented Information Control and Operational Recordkeeping Protocols
- Integrating AI Governance with Existing Information Security Systems

Day 3: Internal Auditing and Evidence Gathering

- Audit Principles, Auditor Responsibilities, and Code of Conduct
- Planning and Scheduling an ISO/IEC 42001 Internal Audit Programme
- Developing Checklists and Interview Protocols for Machine Learning Operations
- Gathering Objective Audit Evidence from Data Pipelines and Model Registries
- Evaluating Continuous Model Monitoring, Validation, and Retraining Controls
- Supplier Evaluation Protocols for Third-Party AI Models and Data Assets

Day 4: Audit Findings and Corrective Action Management

- Classifying Audit Observations, Minor Gaps, and Major Nonconformities
- Root Cause Analysis Protocols using Standard Problem-Solving Methods
- Formulating Actionable Corrective Action Plans and Remediation Timelines
- Drafting the Formal Internal Audit Report and Management Summary
- Management Review Process and Resource Allocation for Continual Improvement
- Monitoring AIMS Key Performance Indicators and Operational Metrics



Day 5: Certification Preparation and Practical Assessment

- Preparing for Stage 1 and Stage 2 Third-Party Certification Audits
- Managing Auditor Interactions, Evidence Requests, and Finding Resolution
- Simulated Internal Audit Exercise on High-Impact AI Applications
- Reviewing Sector-Specific Compliance Scenarios and Governance Challenges
- Consolidating Implementer and Auditor Workflows for Enterprise Maintenance
- Course Review, Knowledge Consolidation, and Programmatic Action Planning

Practical Exercises

Participants complete hands-on activities to resolve operational challenges and build execution plans.

- Suggested activity: Formulate an AI Management System scope statement and corporate AI policy document.
- Suggested activity: Conduct a simulated AI risk assessment on a production machine learning pipeline.
- Suggested activity: Develop an internal audit checklist covering operational transparency and model controls.
- Suggested activity: Draft an audit finding report including nonconformity categorization and corrective action plans.

FAQs

What specific qualifications or prerequisites are needed for participants before enrolling in the course?

No prior certification is required, but familiarity with artificial intelligence concepts, risk management practices, or management system standards is beneficial.

How long is each day's session, and is there a total number of hours required for the entire course?

Each session lasts 4 to 5 hours daily, totaling 20 to 25 hours across five days.

What are the key challenges in implementing ISO/IEC 42001 compliance in AI systems?

Common challenges include defining clear governance structures, aligning operational controls with ethical guidelines, managing evolving model risks, and establishing rigorous audit trails across complex data workflows.



Conclusion

Organizations that adopt structured management systems achieve defensible AI governance, verifiable risk control, and operational resilience. By integrating implementation rigor with disciplined internal audit practices, participants protect organizational integrity, assure compliance with international standards, and position their enterprises for successful external certification.