



ME054: ISO 55000 and Risk-Based Asset Management

Training Description:

This comprehensive training course provides in-depth knowledge of **ISO 55000 Asset Management** principles and **Risk-Based Asset Management (RBAM)**. Participants will learn how to establish, implement, maintain, and improve an effective Asset Management System (AMS). The training course integrates risk-based thinking to ensure asset reliability, cost-effectiveness, and regulatory compliance.

Through **interactive discussions, case studies, and practical exercises**, attendees will gain insights into **ISO 55000, ISO 55001, and ISO 55002** standards while applying risk-based methodologies to enhance decision-making and asset performance.

The training course will highlight:

- The asset management system, organization & risk-based framework specified in PAS 55 & ISO 55000 series
- Life cycle costing advantages and issues
- Asset policies & strategies derived from the business plan
- Formulating effective asset management plans and ensuring that they are carried out
- Continuous improvement and the learning organization

Training Objectives:

By the end of the training, participants will be able to:

- ✓ Understand the ISO 55000 series and its significance in asset management
- ✓ Develop and implement an Asset Management System (AMS) based on ISO 55001
- ✓ Apply Risk-Based Asset Management (RBAM) principles to optimize asset lifecycle performance
- ✓ Identify, assess, and mitigate risks in asset management
- ✓ Align asset management strategies with business objectives and regulatory compliance
- ✓ Use tools and techniques for asset performance monitoring and improvement
- ✓ Prepare for ISO 55001 certification and audits

Training Designed for:

This training course is intended for professionals responsible for asset-intensive organizations, including:

- Asset Managers & Engineers
- Risk Managers & Compliance Officers
- Operations & Maintenance Managers
- Finance & Investment Analysts in asset management
- Quality Assurance & Reliability Engineers
- Health, Safety & Environmental (HSE) Managers
- Executives & Decision-Makers in asset-heavy industries
- Provide a step-by-step guide to Asset Management best practices (as part of PAS 55 & ISO 55000)

Training Requirement:

“Hand’s on practical sessions, equipment and software will be applied during the course if required and as per the client’s request.”

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client's learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

DAY ONE:

❖ Introduction to ISO 55000 & Asset Management Fundamentals

- Introduction to Asset Management (AM) and its Importance
- ISO 55000 Series Overview (ISO 55000, ISO 55001, ISO 55002)
- Principles and Benefits of an Asset Management System (AMS)
- Key Definitions and Asset Management Concepts
- ISO 55001 Requirements and Implementation Framework
- Case Studies: Successful Asset Management Implementations
- Differences between PAS55 & ISO 55000 series & the Assessment & certification: PAM & SAM

📌 Exercise: Gap analysis of existing asset management practices vs. ISO 55001 requirements

DAY TWO:

❖ Asset Lifecycle & Risk-Based Asset Management (RBAM) Principles

- Asset Lifecycle Stages (Acquisition, Operation, Maintenance, Disposal)
- Risk Management Framework (ISO 31000 & ISO 55001 Alignment)
- Identification & Assessment of Asset-Related Risks
- Risk Mitigation Strategies in Asset Management
- Cost-Benefit Analysis in Risk-Based Decision Making
- Criticality Analysis & Asset Prioritization

📌 Workshop: Conducting a Failure Mode and Effects Analysis (FMEA) for key assets

DAY THREE:

❖ Implementing an Asset Management System (AMS) & Performance Evaluation

- Developing an Asset Management Policy, Strategy, and Objectives
- Roles & Responsibilities in AMS Implementation
- Developing Key Performance Indicators (KPIs) for Asset Performance
- ISO 55001 Documentation & Compliance Requirements
- Asset Information Management & Data Analytics
- Reliability-Centered Maintenance (RCM) & Condition Monitoring

📌 Case Study: Designing an Asset Management Plan (AMP) for an organization

DAY FOUR:

❖ ISO 55001 Certification & Continuous Improvement Strategies

- ISO 55001 Certification Process & Audit Readiness
- Internal Audits, Gap Analysis, and Corrective Actions
- Integrating Asset Management with Other Management Systems (ISO 9001, ISO 14001, ISO 45001)
- Digital Transformation & Smart Asset Management (IoT, AI, Digital Twins)
- Sustainability & Environmental Considerations in Asset Management
- Stakeholder Engagement & Communication Strategies

 Exercise: Conducting a mock ISO 55001 audit with non-conformity identification

DAY FIVE:

 Advanced Risk Management & Practical Implementation Strategies

- Advanced Risk-Based Asset Management Models (Monte Carlo, Bowtie Analysis, Bayesian Networks)
- Asset Investment Planning & Financial Risk Assessment
- Business Continuity & Disaster Recovery in Asset Management
- Decision Support Tools & Software for Asset Risk Management
- Developing an Implementation Roadmap for ISO 55001
- Final Review & Action Planning

 Final Project: Each participant will develop an Asset Risk Management Plan and present their implementation strategy

-  Course Conclusion
-  POST-ASSESSMENT and EVALUATION

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Fees:

TBA as per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:

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