

Course No. 1304

Asset Management Training Course

RELIABILITY & ASSET MANAGEMENT
INDUSTRIAL ENGINEERING, MAINTENANCE & OPERATIONS

DURATION

5 Days

DELIVERY

Classroom



Course Overview

The Asset Management Training Course provides a comprehensive professional framework for managing physical assets strategically throughout their entire lifecycle. The course equips participants with the principles, tools, and practical approaches required to maximize asset value, improve reliability and performance, manage risk, optimize maintenance, and support effective lifecycle decisions. It focuses on integrating strategic objectives with engineering, maintenance, operational, financial, and risk considerations.

Effective asset management extends beyond maintaining equipment. It requires organizations to understand how assets contribute to organizational objectives, how risks affect asset performance, how lifecycle decisions influence long-term value, and how resources should be prioritized across an asset portfolio. This course provides participants with a structured approach to managing these interconnected requirements and making informed decisions based on performance, risk, cost, and value.

The course covers the essential disciplines of strategic asset management, including asset management policy and objectives, asset registers and hierarchy, asset criticality, lifecycle planning, risk management, asset performance, maintenance strategy, reliability improvement, asset health, capital investment, renewal and replacement, and performance measurement. Participants will also explore the relationship between asset management and reliability engineering, maintenance management, operational excellence, and financial decision making.

Through practical exercises, case studies, asset assessment activities, and implementation workshops, participants will develop the ability to evaluate asset portfolios, identify performance and risk gaps, establish priorities, develop lifecycle strategies, and build practical asset management improvement plans. The course is designed to help organizations create a more integrated approach to managing assets and achieving sustainable operational and business value.

Objectives

- Analyze the fundamental principles of asset management and their relationship with organizational strategy, performance, risk, cost, and value.
- Develop a structured asset management framework covering asset lifecycle, performance, risk, maintenance, reliability, and investment considerations.

- Evaluate asset portfolios using criticality, condition, performance, risk, and lifecycle criteria to establish improvement priorities.
- Apply risk-based asset management methodologies to identify, assess, prioritize, and treat asset-related risks.
- Design asset management objectives and strategies that align physical asset decisions with organizational and operational requirements.
- Assess asset lifecycle requirements from acquisition and commissioning through operation, maintenance, renewal, replacement, and disposal.
- Improve maintenance and reliability strategies by aligning them with asset criticality, failure behavior, condition, and business requirements.
- Implement practical asset performance indicators for monitoring reliability, availability, utilization, maintenance effectiveness, risk, and lifecycle performance.
- Strengthen asset information and decision-making processes by using reliable technical, operational, maintenance, and financial data.
- Evaluate investment, renewal, replacement, and modification options using lifecycle cost, risk, performance, and value considerations.
- Develop governance, accountability, and cross-functional processes that support effective asset management.
- Prepare a practical asset management improvement roadmap with defined priorities, responsibilities, measures, and implementation actions.

Who Should Attend

The Asset Management Training Course is designed for professionals responsible for the strategic and operational management of physical assets. It is particularly suitable for Asset Managers, Asset Management Engineers, Reliability Engineers, Maintenance Engineers, Maintenance Managers, Reliability Managers, Engineering Managers, Operations Managers, Plant Managers, Asset Performance Specialists, Maintenance Planners, Condition Monitoring Specialists, and Lifecycle Management Professionals.

The course is also relevant to professionals involved in capital planning, asset investment, risk management, engineering strategy, maintenance optimization, operational excellence, procurement, project management, technical services, and infrastructure management. It is especially valuable for multidisciplinary teams responsible for asset criticality assessment, lifecycle planning, reliability improvement, maintenance strategy development, asset performance monitoring, and long-term

asset portfolio decisions.

Executives, directors, senior managers, project leaders, consultants, and technical decision makers will benefit from understanding how asset management connects organizational objectives with technical and financial asset decisions. The course is applicable to manufacturing, energy, utilities, transportation, infrastructure, power generation, mining, petrochemicals, oil and gas, public-sector organizations, and other asset-intensive environments.

Learning Outcomes

- Explain the principles, objectives, scope, and organizational value of modern asset management.
- Establish asset management objectives that are aligned with organizational strategy and stakeholder requirements.
- Develop and evaluate asset hierarchies, asset registers, asset portfolios, and critical asset classifications.
- Assess asset criticality based on operational, financial, safety, environmental, service, and business consequences.
- Analyze asset condition, reliability, availability, utilization, maintenance history, and performance trends.
- Develop lifecycle management strategies covering acquisition, operation, maintenance, renewal, replacement, and disposal.
- Apply risk-based approaches to prioritize asset management activities and investment decisions.
- Evaluate maintenance and reliability strategies against asset criticality, failure behavior, condition, and operational requirements.
- Develop meaningful asset performance indicators for monitoring asset health, reliability, cost, risk, and operational performance.
- Evaluate lifecycle cost and value considerations when comparing asset investment, replacement, refurbishment, and modification options.
- Integrate engineering, maintenance, operations, risk, finance, and asset information into asset management decision making.
- Prepare a practical asset management strategy and implementation roadmap for improving asset performance and lifecycle value.

Course Outline

DAY 01

Foundations of Strategic Asset Management

- Introduction to modern asset management and its role in organizational performance
- Asset management principles, objectives, scope, and value creation
- Relationship between organizational strategy and asset management strategy
- Understanding asset value, performance, risk, cost, and lifecycle considerations
- Asset hierarchy, asset registers, asset portfolios, and asset information requirements
- Defining asset management objectives and performance expectations
- Roles and responsibilities of asset owners, managers, engineers, maintenance, and operations teams
- Strategic versus operational asset management
- Governance, accountability, and cross-functional asset management

PRACTICAL APPLICATION

Develop an asset management framework for a representative asset-intensive organization

DAY 02

Asset Criticality, Risk and Lifecycle Management

- Principles of asset criticality assessment and classification
- Identifying critical assets and establishing criticality criteria
- Operational, financial, safety, environmental, regulatory, and service consequences of asset failure
- Asset risk identification, assessment, treatment, and monitoring
- Risk-based prioritization of asset management activities
- Asset lifecycle planning from acquisition and design through operation and disposal
- Acquisition, commissioning, handover, and operational readiness considerations
- Maintenance, refurbishment, renewal, replacement, and retirement decisions
- Balancing cost, risk, performance, and value throughout the asset lifecycle

DAY 02 — CONTINUED

PRACTICAL APPLICATION

Conduct an asset criticality and lifecycle assessment and establish risk-based priorities

DAY 03**Asset Reliability, Maintenance and Performance Improvement**

- Relationship between asset management, reliability engineering, and maintenance management
- Asset reliability and availability fundamentals
- Failure modes, failure behavior, and asset performance deterioration
- Preventive, predictive, condition-based, and corrective maintenance strategies
- Reliability-Centered Maintenance and its contribution to asset management
- Condition monitoring and asset health management
- Using maintenance history and operational data to identify performance gaps
- Root Cause Analysis, FMEA, FMECA, and criticality analysis within asset management
- Optimizing maintenance resources based on asset criticality and business impact

PRACTICAL APPLICATION

Evaluate a critical asset and develop an integrated reliability and maintenance improvement strategy

DAY 04**Asset Performance Measurement, Data and Financial Decision Making**

- Developing asset management performance measurement frameworks
- Key indicators for reliability, availability, utilization, maintenance, downtime, cost, risk, and asset health
- Leading and lagging asset performance indicators
- Asset performance dashboards and management reporting
- Asset data quality, asset information management, and decision support

DAY 04 — CONTINUED

- Integrating engineering, maintenance, operational, and financial information
- Identifying asset performance trends and emerging risks
- Lifecycle cost analysis and total cost of ownership
- Evaluating refurbishment, replacement, modification, and investment alternatives

PRACTICAL APPLICATION

Develop an asset performance dashboard and evaluate lifecycle investment options for a critical asset

DAY 05

Asset Management Strategy, Governance and Implementation

- Developing an organizational asset management strategy
- Aligning asset management objectives with business and operational priorities
- Developing asset management plans and implementation programs
- Establishing asset management governance, accountability, and decision rights
- Integrating asset management with reliability, maintenance, risk, finance, projects, and operations
- Developing asset improvement and investment portfolios
- Managing asset management change and organizational capability
- Establishing performance reviews and continuous improvement processes
- Developing asset management maturity improvement priorities

FINAL WORKSHOP

Complete an end-to-end asset management assessment and develop a practical asset management strategy and implementation roadmap



Register or Request More Information

Course page: <https://quest-training.com/courses/asset-management-training-course>

Website: <https://quest-training.com>

Email: info@quest-training.com

Phone: +905016771440

