Asset Performance Management (APM) Training Course

Professional Development Training Course Outline

Category	Construction Institute	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Asset Performance Management (APM) has become a strategic business discipline that enables organizations to maximize asset reliability, improve operational efficiency, reduce maintenance costs, and achieve digital transformation through intelligent asset management. Modern industries are leveraging Predictive Maintenance, Artificial Intelligence (AI), Machine Learning (ML), Industrial Internet of Things (IIoT), Digital Twin Technology, Reliability-Centered Maintenance (RCM), Enterprise Asset Management (EAM), and Data Analytics to optimize asset lifecycles while minimizing downtime and operational risks. Organizations implementing robust APM strategies consistently experience higher equipment availability, improved safety compliance, enhanced production efficiency, and increased return on asset investments.

Asset Performance Management Training Course equips professionals with practical knowledge, international best practices, and advanced digital technologies used to monitor, analyze, predict, and optimize asset performance throughout the asset lifecycle. Participants will explore modern maintenance strategies, risk-based asset management frameworks, ISO 55000 standards, reliability engineering techniques, condition monitoring technologies, and performance optimization tools through industry case studies, practical exercises, and real-world implementation scenarios.

Programme Curriculum

Asset Performance Management (APM) Training Course

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Course Duration

5 days

Course Objectives

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

1. Master modern Asset Performance Management (APM) strategies.
2. Implement Predictive Maintenance (PdM) using AI and IoT technologies.
3. Optimize asset lifecycle using ISO 55000 Asset Management Framework.
4. Apply Reliability-Centered Maintenance (RCM) methodologies.
5. Perform Failure Mode and Effects Analysis (FMEA) for critical assets.
6. Utilize Digital Twin Technology for asset optimization.
7. Improve operational efficiency through Condition-Based Monitoring (CBM).
8. Develop Risk-Based Maintenance (RBM) strategies.
9. Analyze asset health using Big Data Analytics and Business Intelligence.
10. Integrate Enterprise Asset Management (EAM) systems with maintenance planning.
11. Enhance equipment reliability using Root Cause Analysis (RCA) techniques.
12. Design KPI dashboards for Asset Reliability, OEE, MTBF, MTTR, and Asset Availability.
13. Develop an enterprise-wide Digital Asset Management Roadmap for sustainable operational excellence.

Target Audience

1. Asset Managers
2. Maintenance Managers and Engineers
3. Reliability Engineers
4. Plant Managers and Operations Managers
5. Mechanical, Electrical, and Instrumentation Engineers
6. Facilities and Infrastructure Managers
7. Digital Transformation and Industry 4.0 Professionals
8. Project Engineers, Technical Consultants, and Asset Management Professionals

Course Modules

Module 1: Fundamentals of Asset Performance Management

- Introduction to Asset Performance Management
- Asset Lifecycle Management Principles
- ISO 55000 Framework

- Asset Criticality Assessment
- Business Value of APM
- **Case Study:** Implementing ISO 55000 in a global manufacturing organization.

Module 2: Reliability Engineering and Maintenance Strategies

- Reliability-Centered Maintenance (RCM)
- Preventive vs Predictive Maintenance
- Risk-Based Maintenance (RBM)
- Failure Mode and Effects Analysis (FMEA)
- Root Cause Analysis (RCA)
- **Case Study:** Reducing equipment failures using Reliability-Centered Maintenance in a refinery.

Module 3: Predictive Maintenance and Condition Monitoring

- Predictive Maintenance Technologies
- Vibration Analysis
- Thermography
- Oil Analysis
- Ultrasonic Condition Monitoring
- **Case Study:** Predictive maintenance implementation that reduced downtime by over 40%.

Module 4: Digital Transformation in Asset Management

- Industrial Internet of Things (IIoT)
- Artificial Intelligence in Maintenance
- Machine Learning Applications
- Digital Twin Technology
- Cloud-Based Asset Monitoring
- **Case Study:** Digital Twin implementation for power plant asset optimization.

Module 5: Enterprise Asset Management Systems

- Enterprise Asset Management (EAM)
- Computerized Maintenance Management Systems (CMMS)
- Asset Data Governance
- Maintenance Planning and Scheduling
- Mobile Workforce Management
- **Case Study:** Enterprise-wide EAM implementation improving maintenance productivity.

Module 6: Asset Analytics and Performance Optimization

- Asset Health Index
- KPI Development
- Overall Equipment Effectiveness (OEE)
- Asset Risk Analytics
- Business Intelligence Dashboards
- **Case Study:** Using analytics to improve asset availability in a mining operation.

Module 7: Risk Management and Asset Sustainability

- Risk Assessment Frameworks

- Asset Integrity Management
- Regulatory Compliance
- ESG and Sustainable Asset Management
- Cybersecurity for Connected Assets
- **Case Study:** Risk-based inspection program reducing operational risks in an oil and gas facility.

Module 8: APM Implementation Roadmap

- Developing an APM Strategy
- Change Management
- Digital Transformation Roadmap
- Continuous Improvement Framework
- Future Trends in Intelligent Asset Management
- **Case Study:** Enterprise Asset Performance Management transformation across multiple industrial sites.

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

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