

Preventive and Predictive Maintenance



Energy Milestones Corporation Advancing Professionals to the next level

Energy Milestones is proud to be accredited, partner and associated with the following association bodies:





















Preventive and Predictive Maintenance

Overview

This course will give participants an in-depth understanding of preventive and predictive maintenance practices; it will also cover many best practice techniques such as Total Productive Maintenance, Reliability Centred Maintenance, Condition Based Monitoring, Failure Modes and Effects Analysis, and Root Cause Failure Analysis.

Course Objectives

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

- Develop, implement and supervise the preventive and predictive maintenance program
- Implement the latest techniques and management styles of leading facilities and maintenance management practices
- Optimise the effectiveness of maintenance by using sophisticated techniques and methods to economise time, money and resources.
- Prevent and limit equipment failures, and rework to improve the equipment's overall effectiveness and reliability.y
- · Decrease downtime and increase profit for their organisation.

Course Content

1. Maintenance Fundamentals

- Definition, policies, and strategies
- Setting maintenance standards and resource allocation

2. Organisational Challenges

- Accountability issues and poor documentation
- KPI reviews and technical history gaps









Preventive and Predictive Maintenance

Course Content

3. Asset Management Principles

- ISO 55000 concepts and asset lifecycle
- Risk, cost, and performance-based decisions

4. CMMS Implementation

- System setup and criticality assignment
- Asset registers, BOMs, and work center allocation

5. Work Identification & Planning

- Work request quality and prioritization
- Estimating time, materials, and external resources

6. Scheduling & Execution

- Rolling schedules and coordination
- · Managing emergent work and standard procedures

7. Feedback & Work Control

- Gathering and using technical feedback
- Cost control and CMMS updates

8. Data Analysis & Performance Reporting

- PM and schedule compliance
- KPIs, backlog tracking, and MTTR analysis

9. Decision Making & Improvement

- · Component replacement and lifecycle costing
- RCA, FMECA, and continuous improvement strategies







Preventive and Predictive Maintenance

Targeted Audience

- Maintenance Managers
- Maintenance Engineers
- Maintenance Supervisors
- Planning Engineers
- Operations Professionals
- Engineering and Purchasing Staff
- Materials Divisions

Course Methodology

Facilitated by an experienced professional trainer, this training course will be conducted as a highly interactive workshop session. A variety of training methodologies and facilitation techniques will be employed before and during the course, as applicable. These methods are aimed at enhancing individual and group interaction while maximising learning. Some of these methods are:

- Online Pre-post Test
- Colourful Visual Aids
- Gamification
- Self-Assessment Instruments
- Simulations
- Case Studies
- Videos
- Group Exercises & Discussions
- · Role plays
- Indoor & Outdoor games



