BOOST
THE LEADING TRAINING PROVIDER

Maintenance & Reliability Management

# Maintenance Planning, Scheduling and Work Control

## Course Introduction

Industry today is in a fight to survive, Competition is on international levels. All forms of production analysis, product reviews, and material reviews are made and periodically checked; statistical process control is only one of the new methods used to reduce operational costs. However one area many industries are now turning their attention toward is the maintenance function. Maintenance Planning and Management is one of the fastest and most effective investments an organization can make to improve productivity and availability. The processes participants learn in this class will allow for planning and control of maintenance resources. Equipment reliability is increased.

**Build systems-independent**

Costs and availability of maintenance stores are improved. Waiting times, unnecessary parts and inaccurate information are eliminated. Budgeting is easier and more accurate. Maintenance tasks are as much as 50% more efficient in terms of costs and time. This five-day course teaches proven processes that are fundamental to effective and efficient maintenance management and successful CMMS/EAMS deployment. Participants engage in hands-on activities that build systems-independent process knowledge and skills they will be able to apply immediately.

## Target Audience

- Facilities Engineer
- Facilities Engineering Manager
- Facilities Manager
- Facilities Specialist / Coordinator
- Health and Safety Engineer
- Maintenance Group Leader
- Maintenance Helper / Assistant
- Maintenance Manager
- Maintenance Superintendent
- Maintenance Supervisor

- Mechanical Reliability Engineer
- Network Reliability Engineer
- Operations and Maintenance Specialist
- Reliability Engineer

## Learning Objectives

- This course is designed to build competency in Work Control as a primary skill set in the Competency Map for Facilities Maintenance Management, and to provide participants sound knowledge about the enhanced planning and scheduling process.
- This course will enable maintenance and planning personnel to manage maintenance activities in accordance to up-to-date modern maintenance policies and available facility equipment and resources.
- In this short course, participants will learn and comprehend advanced maintenance management techniques and practices and apply on several cases studies.
- This includes: maintenance planning, management strategies, repair, inspection, fault diagnosis, preventive maintenance, condition-based maintenance, proactive root cause analysis and resource management.
- The course will focus on the six phases of work management: work identification, planning, prioritization, scheduling, execution and history capture.
- These essential skills are the key components of integrity management, safety, resource control, and reliable operation.

## Course Outline

- **01 DAY ONE**

  **Module1: Maintenance Introduction**

  - Industry revolution and maintenance evolution
  - The role of maintenance in organization productivity
  - Maintenance and Profitability
  - RAMS modeling

- Modern maintenance cycle
- Maintenance definition
- Types of maintenance
- Maintenance organization “Classification of Roles in Maintenance”
- Role of Maintenance Planner
- Role of Maintenance Supervisor
- Maintenance goals and objectives
- Maintenance vision and mission
- Maintenance policies and strategies
- Maintenance planning and management
- Group Quiz "Maintenance Policies"

**Module 2: Preventive Maintenance (PM):**

- PM concept
- Steps for implementing a PM program
- PM tasks clarifications and intervals
- PM action plan pattern
- Maintenance procedures
- Maintenance tasks and frequencies
- Element of maintenance cost
- Size of maintenance labor force
- Annual downtime cost losses
- Maintenance resource profile
- Annual PM plan
- Monthly PM plans
- Establish scheduling
- Availability and reliability
- Group Workshop "Centrifugal Pump PM planning"
- Topic review, Group discussion & Quiz

• **02 DAY TWO**

**Module 3: Job plan and maintenance procedure**

- Objective
- Layout
- Contents
- Discussion Session "Concepts and techniques for effectively planning, scheduling and controlling maintenance activities".

**Module 4: Predictive Maintenance (PdM):**

- Definition of PdM
- PdM focuses
- Advantages and disadvantages
- Plant equipment classification
- P-F Curve and PdM planning
- PdM process cycle
- The mortality of machinery
- Condition based management
- Condition based trend and limits
- Condition based maintenance process
- PdM planning
- PdM techniques.
- Group Quiz "Rotating equipment fault detection"
- Topics review, Q&A & daily assessment

• **03 DAY THREE**

**Module 5 : Maintenance Work Management:**

- Roles and responsibilities (RACI model)
- The Work Order System
- Work request
- Work order (type, priority, status, cycle, forms)
- WO life cycle o WO preparation
- WO scheduling
- Flow of work requests
- Determination of priority
- WO execution and close out o Activity "RACI model exercise"
- Topics review, Q&A & daily assessment

• **04 DAY FOUR**

**Module 6 : Maintenance Planning and Scheduling:**

- Planning fundamentals
- Equipment identification structures
- Structures for planning
- Anatomy of a planned job
- Work planning and control
- Goals of Maintenance Planning (Wrench time improvement)
- Planning procedures
- Master schedule

- Maintenance level and cost optimization
- Scheduling process
- Backlog management
- Activity ; Case Study "PM planning"

**Module 7 : Controlling Maintenance Work**

- Measuring Performance
- Schedule compliance
- PM and Emergency indices
- Wrench time
- MTBF
- Topics review, Q&A & daily assessment

• **05 DAY FIVE**

**Module 8 : Key Performance Indicators (KPI)**

- Preface and introduction.
- Performance measure and level
- Objective and purpose
- KPI as a tool of continuous improvement
- Efficiency Indicators
- Mean Time Between Failure
- Mean Time To Repair
- Availability
- Reliability
- Performance Indicators:
- Overtime worked
- Contracted manpower
- Training & Competency

## Confirmed Sessions

| FROM | TO | DURATION | FEES | LOCATION |
|---|---|---|---|---|
| June 16, 2025 | June 20, 2025 | 5 days | 4250.00 $ | UAE - Abu Dhabi |

| FROM | TO | DURATION | FEES | LOCATION |
|---|---|---|---|---|
| Sept. 29, 2025 | Oct. 3, 2025 | 5 days | 4950.00 $ | Italy - Rome |
| Nov. 3, 2025 | Nov. 7, 2025 | 5 days | 4250.00 $ | UAE - Dubai |