



Maintenance & Reliability Management

Best Practices Maintenance Plan for Electrical Equipment

Course Introduction

Electrical Preventive Maintenance (EPM) program in place?

Electrical Power has become the life blood of our everyday needs. In a manufacturing environment where today's "lean manufacturing" and "just in time" delivery philosophies are making Reliability and Plant uptime more Critical than ever before, dependable Electrical Distribution is not an Option – it is Critical to Corporate Fiscal Health. What would be the impact on your company if a major component in your facility's Electrical System experienced a Catastrophic Failure? What would happen to your Plant's Production Line, Data Center or Distribution Center? Would the lost opportunity revenue, added to the repair or replacement costs for critical equipment, be more or less than the dollars saved by not having a proactive Electrical Preventive Maintenance (EPM) program in place? Maintenance Planning and Scheduling of work orders is the hub of a well-functioning Maintenance Organization.

Work Order History, and Standard Job Plans

In order for maintenance planning and scheduling to work many other systems need to work well. Most importantly equipment inspections through Preventive Maintenance, Technical Database such as bill of Materials, Work Order History, and Standard Job Plans. Maintenance Spare Part Stores have to function well, thus, Maintenance Planning and Scheduling is critical for every successful individual and company.

The focus are directed on concepts of Maintenance Management, establishing a healthy Maintenance program and Maintenance Planning and Scheduling procedures. Computer applications on maintenance planning and scheduling will be addressed too. Emphasis on various aspects of analytical techniques which have proved valuable in Maintenance Planning and Scheduling.

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

- Lead their Organization and Management into Predictive, and Productive Management of Electrical Equipment
- Identify planning Best Practices and key Elements for taking action on them.
- Improve the use of Information and Communication Tools.
- Create and preserve lead - Time in work management and use it for planning and scheduling resources.
- Have improved ability to influence people (Engineers, Electricians) to perform their Effective Maintenance Plan.
- Improve Consistency and Reliability of Asset Information Management.
- Optimize Preventive and Predictive Maintenance Strategies.

Course Outline

• 01 DAY ONE

Module (01) Maintenance Hierarchy

- 1.1 Specific Maintenance Definition

- 1.2 Maintenance Goals/ Objectives
- 1.3 Reactive Maintenance (RM)
- 1.4 Predictive Maintenance (PdM)
- 1.5 Preventative Maintenance (PM)
- 1.6 Total Productive Maintenance (TPM)
- 1.7 Reliability - Centered Maintenance (RCM)
- 1.8 Overall Equipment Effectiveness (OEE)
- 1.9 Principles of Maintenance Management

Module (02) Maintenance Performance Strategies

- 2.1 Working Environment
- 2.2 Operations Support
- 2.3 Maintenance Personnel Attributes
- 2.4 Maintenance Programs
- 2.5 Information and Knowledge
- 2.6 Effective Planning & Scheduling
- 2.7 The Role & Duties of Planner & Scheduler
- 2.8 Management information System
- 2.9 Case Studies on Electrical Equipment Applications

• 02 DAY TWO

Module (03) Maintenance Planning

- 3.1 Why we have a Maintenance Plan?
- 3.2 Maintenance Process
- 3.3 Expected Outcomes
- 3.4 Maintenance Budget
- 3.5 Levels of Planning
- 3.6 Effective Planned Maintenance
- 3.7 How to implement a good Maintenance Plan (Manpower, Spare Parts, Tools)
- 3.8 Plan Evaluation & Feedback
- 3.9 Maintenance Planning Model (Best Practices)

Module (04) Maintenance Workload

- 4.1 Maintenance Workload
- 4.2 Backlog Management
- 4.3 Backlog Analysis & Feedback
- 4.4 Daily / Weekly Backlog Report

• 03 DAY THREE

Module (05) Scheduling Techniques

- 5.1 Scheduling Techniques
- 5.2 Scheduling Procedures
- 5.3 Daily Scheduling (Stick to your Schedule)
- 5.4 Weekly Scheduling
- 5.5 Establishing Priority
- 5.6 “Look - Ahead” Scheduling
- 5.7 Maintenance Scheduling Check List

Module (06) Role in Cost Reduction

- 6.1 Cost Reduction Job
- 6.2 Control Absenteeism during Plan Tardiness
- 6.3 Controlling and Analyze Working Overtime
- 6.4 Importance of Maintenance Work Quality
- 6.5 Cutting the Cost of Maintenance
- 6.6 Importance and Criticality of Housekeeping
- 6.7 Cost Reduction & Optimization Model

• 04 DAY FOUR

Module (07) Maintenance Plan for Switchgears

- 7.1 Operation of Switchgears
- 7.2 Testing and Inspection
- 7.3 Mechanical Inspection for CB's
- 7.4 Switchgear Maintenance Activities

Module (08) Transformer Maintenance

- 8.1 Testing and Inspection
- 8.2 Condition Monitoring
- 8.3 Case Studies & Workshop Discussion

• 05 DAY FIVE

Module (09) Electrical Motors

- 9.1 Observation during Operation
- 9.2 Maintenance Activities
- 9.3 Planning for Overhauling
- 9.4 Testing and Inspection

Module (10) Electrical Equipment Life Management

- 10.1 Operational Activities
- 10.2 Condition Monitoring
- 10.3 Effective Maintenance Plan
- 10.4 Tools and Systems
- 10.5 10 Rules for Improvement of Life Spain

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
June 16, 2025	June 20, 2025	5 days	5950.00 \$	USA - Texas
Sept. 1, 2025	Sept. 5, 2025	5 days	4250.00 \$	UAE - Dubai
Dec. 15, 2025	Dec. 19, 2025	5 days	4250.00 \$	UAE - Dubai