Advanced Maintenance Planning and Scheduling

Overview:--This intensive 5-day program provides participants with a comprehensive understanding of maintenance management practices, from fundamental types of maintenance to advanced planning, scheduling, performance measurement, and reporting techniques. The course blends theory, practical tools, and case studies to help professionals enhance maintenance efficiency, reliability, and productivity.

Pre-requisites

Participants are expected to have a technical background in engineering or maintenance, either through formal education (diploma/degree) or equivalent practical experience. A minimum of one to two years of exposure to maintenance or plant operations is recommended, along with a basic understanding of maintenance concepts and industrial safety practices. Familiarity with MS Office tools is required, while prior experience with CMMS or ERP systems is considered an advantage. An analytical mindset and problem-solving approach will help participants gain maximum value from the course.

Day 1

Maintenance types.

- Planned vs Unplanned maintenance
- Preventive Maintenance.
- Predictive Maintenance.
- Reliability Centered Maintenance.
- Total Productive Maintenance.
- Prioritization of maintenance activities.

Day 2

Planning:

- Identifying and allocating of maintenance resources
- Estimating resources availability
- Developing maintenance plans
- The planner's "Tool Box" – aids to improved planning
- Developing effective and realistic maintenance programs
- Equipment and maintenance standards
- Monitoring maintenance performance
- Quantitative techniques / ratios
- Maintenance scheduling / controlling pending jobs

Day 3

Measuring Maintenance Performance and Making Improvements:

- Statistical measurement of the maintenance efforts
- Maintenance productivity and reliability
- Minimizing emergency maintenance
- Understanding KPIs for Maintenance
- Overview and case study of large Middle-East Refinery-with KPI
- Showing a KPI in practice and a Maintenance Monitoring system.

Day 4

Scheduling: - Work Control & Monitoring

- Developing a maintenance schedule
- Scheduling methods – allocation, dynamic, queuing models

- Developing daily and weekly work schedule
- Optimizing resources, lead leveling, CIN scheduling
- Trouble shooting electrical motor problems
- Evaluating electrical systems

Day 5

Report generation and Graphical Presentation:

- Maintenance performance indices
- Effective presentation of maintenance data
- Graphical “do’s and “don’ts
- How to prepare Technical Reports.