Best Practices in Maintenance Planning and Scheduling (Advanced)

TR156

Course Overview:

In this comprehensive three-day program, we will delve into the intricacies of maintenance planning and scheduling, equipping you with advanced knowledge and skills to optimize maintenance processes and enhance the reliability of your organization's assets. Maintenance planning and scheduling are critical functions that significantly impact the efficiency and cost-effectiveness of any operation. In this advanced course, we will go beyond the basics and explore the best practices and strategies that will enable you to take your maintenance processes to the next level.

Course Objective:

By the end of this course, you will:
o Understand the fundamental principles of maintenance planning and scheduling and their importance in asset management and reliability.
o Learn how to evaluate, select, and implement maintenance strategies based on asset criticality and risk, ensuring that your resources are utilized efficiently.
o Gain advanced skills in work identification and prioritization, ensuring that the most critical maintenance tasks are addressed promptly.
o Master techniques for effective resource allocation, reducing downtime and maximizing the availability of equipment.
o Explore the integration of Computerized Maintenance Management Systems (CMMS) and understand how to harness their power to streamline your planning and scheduling processes.
o Become proficient in risk-based maintenance methodologies, allowing you to prioritize high-risk tasks and enhance overall asset reliability.
o Gain the knowledge and skills necessary to plan and execute equipment shutdowns and turnarounds with minimal disruption and resource optimization.
o Learn how to measure and continuously improve maintenance performance through the use of key performance indicators (KPIs) and metrics.
o Develop expertise in root cause analysis techniques to prevent recurring failures and improve equipment reliability.
o Understand how Lean principles and continuous improvement methodologies can be applied to reduce waste and increase overall maintenance efficiency.

Course Outline:

Day 1: Maintenance Planning Fundamentals
1. Introduction to Maintenance Planning and Scheduling
•Understanding the importance of effective planning and scheduling.
•Goals and objectives of maintenance planning.
2. Asset Management and Reliability Principles
•The relationship between asset management, reliability, and maintenance.
•Key concepts in reliability-centered maintenance (RCM).
3. Maintenance Strategy Development
•Evaluating different maintenance strategies (e.g., preventive, predictive, corrective).
•Selecting the most appropriate strategy based on asset criticality and risk.
4. Work Identification and Prioritization
•Methods for identifying maintenance work.
•Prioritizing maintenance tasks based on criticality and other factors.
Day 2: Maintenance Planning Techniques
5. Planning and Scheduling Fundamentals
•The roles of planners and schedulers in the maintenance process.
•Developing maintenance plans and schedules.
6. Work Order Management
•Creating effective work orders.
•Data collection and documentation requirements.
7. Resource Allocation
•Allocating labor, materials, and equipment for scheduled maintenance.

Training Language:

Training Methodology:

This training program will employ a combination of teaching methods to enhance participant engagement and knowledge retention:
o Presentations: Instructor will deliver informative presentations covering the course material.
o Group Discussions: Participants will engage in discussions to share their insights and experiences.
o Case Studies: Real-world examples of electrical incidents will be analyzed.
o Assessments: Regular quizzes and a final assessment will evaluate participants' comprehension.

Venue | Date | Fees

Riyadh | 20-04-2025 | 17,250 SAR
Khobar | 18-05-2025 | 14,375 SAR
Khobar | 15-06-2025 | 14,375 SAR

•Ensuring availability of resources when needed.
8. CMMS (Computerized Maintenance Management System) Integration
•Leveraging CMMS software for efficient planning and scheduling.
•Best practices for data management within CMMS.
Day 3: Advanced Techniques and Continuous Improvement
9. Risk-Based Maintenance
•Applying risk analysis to maintenance planning.
•Mitigating high-risk maintenance activities.
10. Shutdowns and Turnarounds
•Planning and executing large-scale equipment shutdowns.
•Minimizing downtime and optimizing resources.
11. Key Performance Indicators (KPIs) and Metrics
•Measuring maintenance performance.
•Using KPIs for continuous improvement.
12. Root Cause Analysis
•Investigating failures to prevent recurrence.
•Techniques like fault tree analysis, fishbone diagrams, etc.
13. Continuous Improvement and Lean Principles
•Applying Lean methodologies to maintenance.
•Reducing waste and improving efficiency.
14. Case Studies and Group Exercises
•Real-world examples of successful maintenance planning and scheduling.
•Group exercises to apply concepts learned during the course.
15. Final Assessment and Q&A
•Review and assessment of key takeaways.
•Opportunity for participants to ask questions and seek clarification.

Who Should Attend:

Experienced maintenance professionals, including managers, planners, and engineers, looking to advance their skills and knowledge in maintenance planning and scheduling.