# MAINTENANCE, PLANNING, SCHEDULING & CONTROL



GENTEX Training Center LLC | Orlando - FL, USA Info@gentextraining.com



#### **Introduction:**

Effective maintenance, planning, scheduling, and control are essential for optimizing the performance and longevity of equipment and assets in any organization. In industries such as manufacturing, energy, and facilities management, a well-designed maintenance system is crucial not only for operational efficiency but also for reducing costs, improving safety, and enhancing overall productivity.

The Maintenance, Planning, Scheduling & Control course provided by Gentex Training Center is a comprehensive program designed to equip participants with the key skills and knowledge needed to efficiently manage the maintenance process. This 5-day training will cover fundamental principles and best practices in maintenance management, focusing on the integration of planning, scheduling, and control systems to achieve maximum operational efficiency.

This course is ideal for professionals who are responsible for maintenance operations, plant managers, engineers, and maintenance planners who wish to develop and enhance their ability to manage complex maintenance processes. By the end of the course, participants will be able to implement systematic approaches to maintenance planning and scheduling, improve equipment reliability, and reduce downtime.

# **Course Objectives:**

- Understand the Importance of Maintenance Planning and Scheduling: Learn the key components of effective maintenance planning and scheduling. Understand the relationship between maintenance planning and overall production efficiency. Recognize the impact of good planning on reducing costs, increasing equipment life, and minimizing downtime.
- Implement Best Practices in Maintenance Planning: Gain a thorough understanding of how to create and manage preventive and predictive maintenance programs. Develop strategies for planning maintenance activities in alignment with operational goals, ensuring that planned maintenance does not interfere with production.



GENTEX Training Center LLC | Orlando - FL, USA Info@gentextraining.com



- Master Scheduling Techniques: Explore techniques and methods for effectively scheduling maintenance activities to minimize disruptions. Learn how to prioritize maintenance tasks based on equipment criticality, resource availability, and operational requirements.
- Apply Effective Maintenance Control Systems: Learn how to implement maintenance control systems that ensure compliance with maintenance schedules, track performance, and identify areas for improvement. Understand how to measure and report on maintenance effectiveness, using key performance indicators (KPIs).
- Optimize Resource Utilization: Learn how to optimize the use of human, financial, and material resources for maintenance activities. Explore how to balance resources between preventive maintenance, corrective maintenance, and unplanned downtime.
- Develop Maintenance Budgets: Understand how to prepare, manage, and control maintenance budgets. Learn how to assess the financial implications of different maintenance strategies and align budget allocation with organizational goals.
- Enhance Communication and Coordination: Understand the importance of communication in maintenance operations. Learn how to coordinate with other departments such as operations, production, and engineering to ensure the smooth execution of maintenance tasks.
- Utilize Maintenance Software Tools: Gain insights into the use of modern maintenance management software tools, such as CMMS (Computerized Maintenance Management Systems), to streamline the maintenance process, manage work orders, and track asset performance.

# Course Methodology:

- Lectures & Presentations: These provide an overview of essential concepts, techniques, and industry standards in maintenance planning and scheduling.
- Case Studies: Real-world case studies are used to demonstrate practical applications and challenges in maintenance management, fostering critical thinking and problem-solving.
- Interactive Discussions: Group discussions and peer learning sessions allow participants to share experiences and insights, providing a collaborative learning environment.



GENTEX Training Center LLC | Orlando - FL, USA Info@gentextraining.com



- Workshops & Exercises: Hands-on exercises will help participants apply the principles learned to real maintenance planning scenarios.
- Simulations & Role-playing: Simulated exercises will help participants practice their skills in a controlled, risk-free environment, such as managing maintenance schedules and resolving common challenges.
- Assessments: Short quizzes and tests are included to reinforce learning and ensure that participants can apply the concepts covered.

This combination of theoretical and practical learning ensures that participants are able to not only understand the concepts but also apply them effectively in their respective workplaces.

#### Who Should Take This Course:

- Maintenance Managers: Individuals responsible for overseeing maintenance operations and ensuring that maintenance activities are executed effectively and efficiently.
- Maintenance Planners and Schedulers: Professionals involved in planning and scheduling maintenance activities to minimize equipment downtime and maximize productivity.
- Plant Engineers and Technicians: Individuals who are involved in the maintenance and repair of plant equipment and machinery.
- Operations Managers: Those who oversee production and operational processes and need to ensure smooth coordination between maintenance and operations.
- Facility Managers: Professionals managing the upkeep of large facilities and looking for strategies to improve maintenance planning and scheduling.
- Production Managers: Those responsible for optimizing production processes who must integrate maintenance activities with production requirements.

Anyone involved in maintenance management or looking to optimize their organizations maintenance processes will benefit from this course.



GENTEX Training Center LLC | Orlando - FL, USA Info@gentextraining.com



#### **Course Outlines:**

# Day 1: Introduction to Maintenance, Planning & Scheduling

- Overview of Maintenance Management and its Importance
- Types of Maintenance: Corrective, Preventive, Predictive
- Maintenance Strategy Development
- Integrating Maintenance into Organizational Objectives
- Workshop: Identifying Key Maintenance Challenges in Your Organization

### **Day 2: Maintenance Planning Techniques**

- Planning for Preventive and Predictive Maintenance
- Developing Maintenance Plans and Schedules
- Resource Planning and Allocation
- Managing Spare Parts and Inventory
- Exercise: Creating a Maintenance Plan for Critical Equipment

# Day 3: Scheduling Maintenance Tasks Effectively

- The Role of Scheduling in Reducing Downtime
- Prioritization of Maintenance Tasks Based on Criticality
- Scheduling Techniques and Tools
- Balancing Scheduled Maintenance with Production Demands
- Case Study: Scheduling Challenges in Complex Operations



GENTEX Training Center LLC | Orlando - FL, USA Info@gentextraining.com



# Day 4: Maintenance Control and Performance Monitoring

- Tracking Maintenance Performance and Key Metrics
- Managing Work Orders and Service Requests
- Analyzing Maintenance Data for Continuous Improvement
- Introduction to Maintenance Management Software (CMMS)
- Activity: Setting Up KPIs for Maintenance Performance

## Day 5: Advanced Techniques and Best Practices

- Managing Maintenance Budgets and Cost Control
- Managing Risk and Safety in Maintenance Operations
- Developing a Culture of Continuous Improvement
- Using Technology to Enhance Maintenance Efficiency
- Final Assessment: Designing a Comprehensive Maintenance Plan for a Facility

#### Conclusion:

By successfully completing the Maintenance, Planning, Scheduling & Control course at Gentex Training Center, participants will gain a comprehensive understanding of how to design and manage effective maintenance systems. They will leave with the practical knowledge needed to reduce downtime, optimize resources, and enhance the performance of maintenance operations. The skills learned in this course will help participants drive better results in their organizations, contributing to the overall operational efficiency and success of their maintenance teams.



GENTEX Training Center LLC | Orlando - FL, USA Info@gentextraining.com



This course is more than just a certification its an investment in your ability to manage and improve maintenance systems effectively, leading to tangible improvements in productivity, cost savings, and equipment reliability.

This well-researched and structured course will provide you with the essential tools to elevate your maintenance management strategies and contribute meaningfully to your organizations success.

