Advanced Maintenance Planning, Scheduling and Work Control Training Course



21 - 25 Dec 2026

Cape town

4600 € (Per Person)

Ref: #INM1427_277668

Course Introduction / Overview:

This comprehensive training course provides an in-depth exploration of the principles and best practices for effective maintenance planning, scheduling, and work control. In today's competitive industrial landscape, moving from a reactive to a proactive maintenance strategy is crucial for enhancing asset reliability, ensuring safety, and optimizing operational costs. This program is designed to equip participants with the skills to master the entire maintenance work management cycle, from initial work identification to performance analysis. Drawing upon established methodologies, such as those detailed by experts like Terry Wireman in his seminal work, the "Maintenance Planning and Scheduling Handbook," the course delves into practical techniques for developing detailed job plans, creating realistic schedules, and implementing robust work control systems. Participants will learn how to effectively utilize a Computerized Maintenance Management System (CMMS) to streamline workflows and manage maintenance backlogs. BIG BEN Training Center has structured this course to bridge the gap between theory and practice, ensuring that attendees can immediately apply learned concepts to reduce downtime, improve resource allocation, and contribute significantly to their organization's bottom line through world-class maintenance management.

Target Audience / This training course is suitable for:

- Maintenance Planners and Schedulers.
- Maintenance Supervisors and Team Leaders.
- Reliability Engineers and Asset Managers.
- Maintenance Managers and Superintendents.
- Operations and Production Managers.
- CMMS Administrators and Power Users.
- Lead Technicians and Maintenance Foremen.
- Project Engineers involved in maintenance activities.

Target Sectors and Industries:

- Manufacturing and Industrial Production.
- Oil, Gas, and Petrochemical Industries.
- Power Generation and Utilities.
- Mining, Minerals, and Metals Processing.
- Pharmaceuticals and Life Sciences.
- Facilities Management and Real Estate.
- Transportation, Aviation, and Logistics.
- Governmental and Public Sector Operations.

Target Organizations Departments:

- Maintenance and Reliability Departments.
- Engineering and Technical Services.
- Operations and Production Units.
- Asset Management and Integrity Teams.
- Facilities and Plant Management.
- Procurement and MRO Inventory Management.
- Health, Safety, and Environment (HSE) Departments.
- Continuous Improvement and Operational Excellence Teams.

Course Offerings:

By the end of this course, the participants will have able to:

- Develop comprehensive and accurate maintenance job plans.
- Implement effective work order prioritization techniques.
- Create and manage optimized weekly and daily maintenance schedules.
- Effectively manage and control maintenance backlogs.
- Utilize CMMS functionalities for planning and scheduling.
- Define and track key performance indicators (KPIs) for maintenance.
- Improve coordination between maintenance, operations, and supply chain.
- Implement strategies for continuous improvement in maintenance processes.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be highly interactive and participant-centered, ensuring a deep and practical understanding of maintenance management principles. We move beyond traditional lectures to create an immersive learning environment where attendees actively engage with the material. The course heavily relies on real-world case studies from various industries, allowing participants to analyze complex maintenance scenarios and develop effective solutions. Group discussions and collaborative workshops encourage the sharing of experiences and best practices among peers. Practical exercises, including the development of sample job plans and maintenance schedules, provide hands-on experience. Interactive simulations will challenge participants to make critical decisions regarding resource allocation and backlog management in a risk-free setting. Throughout the course, our expert instructor facilitates learning, provides personalized feedback, and ensures that the theoretical concepts are firmly linked to the practical challenges faced by participants in their daily roles, guaranteeing a valuable and applicable learning outcome.

Course Agenda (Course Units):

Unit One: Fundamentals of Proactive Maintenance Management

- The Strategic Importance of Maintenance Planning and Scheduling.
- Transitioning from a Reactive to a Proactive Maintenance Culture.
- Roles and Responsibilities of the Planner, Scheduler, and Supervisor.
- Understanding the Complete Maintenance Work Management Cycle.
- The Critical Link Between Maintenance and Asset Reliability.
- Introduction to Reliability-Centered Maintenance (RCM) Concepts.
- Integrating Safety into Every Step of the Maintenance Process.

Unit Two: The Art and Science of Maintenance Planning

- Principles of Effective Work Identification and Scoping.
- Developing Standardized and Detailed Maintenance Job Plans.
- Estimating Labor Hours, Materials, and Tool Requirements.
- Sourcing and Staging Parts for Planned Maintenance Work.
- Utilizing Maintenance History and Technical Documentation.
- Planning for Preventive, Predictive, and Corrective Maintenance.
- The Role of the CMMS in the Planning Process.

Unit Three: Mastering Maintenance Scheduling and Coordination

- The Distinction Between Planning and Scheduling.
- Developing a Master Schedule and Managing the Backlog.
- Techniques for Creating Weekly and Daily Maintenance Schedules.
- Resource Leveling and Capacity Planning for Maintenance Teams.
- Coordinating with Operations for Equipment Availability.
- Managing Schedule Breakers and Emergency Work Effectively.
- Using Gantt Charts and Other Tools for Visual Schedule Management.

Unit Four: Effective Work Control and Execution Management

- The Lifecycle of a Work Order from Creation to Closure.
- Issuing Work Packages and Conducting Pre-job Briefings.
- Monitoring Work in Progress and Tracking Execution Status.
- Managing Work Execution to Ensure Compliance with the Plan.
- Proper Work Order Closure and Data Capturing.
- Implementing Permit to Work (PTW) and Lockout-Tagout (LOTO) Procedures.
- Post-maintenance Testing and Handover to Operations.

Unit Five: Measuring Performance and Driving Continuous Improvement

- Establishing Key Performance Indicators (KPIs) for Maintenance.
- Measuring Metrics such as Schedule Compliance and PM Compliance.
- Analyzing Maintenance Data to Identify Improvement Opportunities.
- Conducting Root Cause Analysis (RCA) for Equipment Failures.
- Developing and Presenting Effective Maintenance Reports.
- Fundamentals of Planning for Shutdowns and Turnarounds.
- Building a Culture of Continuous Improvement in the Maintenance Department.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

How can an organization shift its culture from a reactive 'firefighting' maintenance approach to a proactive, planner-led reliability mindset, and what is the single most significant barrier to this transformation?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by adopting a holistic and integrated approach to maintenance management, viewing planning, scheduling, and work control not as isolated functions but as interconnected pillars of a robust asset management strategy. While many courses may focus narrowly on software tools or singular processes, this program emphasizes the strategic thinking and cultural shift required to achieve operational excellence. We delve into the "why" behind the "what," exploring the behavioral and organizational dynamics that underpin successful maintenance programs. The curriculum is built on a foundation of proven, globally recognized best practices, yet it is delivered with a sharp focus on practical, real-world application. Participants will not just learn to create a schedule; they will learn how to build a scheduling philosophy that aligns with production goals and enhances asset reliability. The course content is designed to empower attendees to become agents of change within their organizations, equipped with the skills to justify proactive maintenance initiatives, measure their financial impact, and lead the transition toward a culture of continuous improvement and high reliability.