

# Maintenance Planning, Scheduling and Following up

البرنامج المتقدم في تخطيط وجدولة ومراقبة أعمال الصيانة

> 18 – 22 October 2020 Dubai / United Arab Emirates











Dubai / United Arab Emirates



#### Introduction

Planning is the process of thinking about the activities required to achieve a desired goal. It is the first and foremost activity to achieve desired results. It involves the creation and maintenance of a plan, such as psychological aspects that require conceptual skills. There are even a couple of tests to measure someone's capability of planning well. As such, planning is a fundamental property of intelligent behavior. An important further meaning, often just called "planning" is the legal context of permitted building developments.

Also, planning has a specific process and is necessary for multiple occupations (particularly in fields such as management, business, etc.). In each field there are different types of plans that help companies achieve efficiency and effectiveness. An important, albeit often ignored aspect of planning, is the relationship it holds to forecasting. Forecasting can be described as predicting what the future will look like, whereas planning predicts what the future should look like for multiple scenarios. Planning combines forecasting with preparation of scenarios and how to react to them. Planning is one of the most important project management and time management techniques. Planning is preparing a sequence of action steps to achieve some specific goal. If a person does it effectively, they can reduce much the necessary time and effort of achieving the goal. A plan is like a map. When following a plan, a person can see how much they have progressed towards their project goal and how far they are from their destination.

#### **Needs & Benefits**

Maintenance Planning, control and documentation is critical for every successful industrial organization.

This intensive 5-day course has been designed to benefit engineers and technicians who are involved in the operation and maintenance of any industrial unit. It covers all the fundamentals of Maintenance as well as the advanced techniques of maintenance planning, scheduling & monitoring. A focuses are directed on basic concepts preventive and predictive maintenance programs and scheduling procedures for machinery troubleshooting.

The understanding of possible reasons leading to machinery failure is important to personnel involved to machinery, design, manufacture, operation and maintenance. This will help all of them to take possible precessions in their jobs to avoid future failures.





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# **Objectives**

To supply the participants with the basic and advanced tools and techniques for applying the maintenance management and planning for all facilities.

# **Who Should Attend?**

Mechanical and electrical maintenance engineers and qualified technicians. Also for the maintenance planners and managers.

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#### **Course Outline**

# **Day One**

#### **Types of Maintenance**

- Maintenance philosophy
- Reactive maintenance
- Time based maintenance
- Condition based maintenance
- Proactive maintenance
- Application of maintenance programmers
- Causes of machine failures.
- Maintenance strategies

# **Day Two**

#### The Failure Analysis and Troubleshooting System

- Troubleshooting as an Extension of Failure Analysis.
- Causes of Machinery Failures.
- Root Causes of Machinery Failure.
- Expert system for maintenance
- Methods of fault analysis
- Vibration analysis and diagnostic

# Inspection & remaining life evaluation of process plant equipment

**Basics of NDT** 

Applying the predictive approach
Surviving the maintenance shutdown

The planning & scheduling machines

#### Day Three

Maintenance Control Systems/Procedures
Work Request/Work Order System
Typical Files for Maintenance Control

- Work Request/Order Backlog File
- Scheduling Backlog File
- Awaiting Materials File
- Preventive Maintenance Control File



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- Closed Work Request/Order File
- Inventory Control File

# **Management Reports**

- Maintenance Backlog Report
- Maintenance Performance Report
- Monthly Status Report
- · Application planning sheet
- · Building maintenance scheduling
- Case Study & Application
- Maintenance project management and planning module

# **Day Four**

# **Initiating Maintenance Requests**

• Procedure

### **Processing By Work Receipt and Control**

- Unplanned Maintenance
- Planned Maintenance
- Procedure
- Estimating
- Labor
- Management software (e.g.: MS Project, Excel,......)

#### **Maintenance planning**

- Planner qualifications
- Planning Work Flow
- Good maintenance elements

# **Day Five**

#### Preparing maintenance plan

- Planning sheet
- Planning of spare parts (Maintenance Material Control)
- Stock holding costs
- Stock ordering costs
- Lead time elements
- Economical order quantity EOQ

# Materials requirements planning (MRP)

Computer applications in maintenance material control



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# **Training Method**

- Pre-assessment
- Live group instruction
- Use of real-world examples, case studies and exercises
- Interactive participation and discussion
- Power point presentation, LCD and flip chart
- Group activities and tests
- Each participant receives a binder containing a copy of the presentation
- slides and handouts
- Post-assessment

#### **Program Support**

This program is supported by interactive discussions, role-play, and case studies and highlight the techniques available to the participants.

#### Schedule

# The course agenda will be as follows:

•	Technical Session	08.30-10.00 am
•	Coffee Break	10.00-10.15 am
•	<b>Technical Session</b>	10.15-12.15 noon
•	Coffee Break	12.15-12.45 pm
•	<b>Technical Session</b>	12.45-02.30 pm
•	Course Ends	02.30 pm

#### **Course Fees\***

#### • 2,950USD

\*VAT is Excluded If Applicable