



ME184

Advanced Maintenance Planning, Scheduling & Work Control

Course Introduction:

This program is intended to introduce participants to a deep and advanced knowledge of maintenance planning & scheduling. The program also introduces participants to the importance of maintenance planning & scheduling as a tool for prolonging equipment life and preventing major problems. A focus is directed on planning and scheduling procedures, types of maintenance plans, classification of equipment maintenance and techniques, maintenance work allocation and task assignment.

This program also emphasizes maintenance sequencing, equipment replacement, Planning and control of spare parts, materials requirements planning, queuing theory & waiting time, maintenance project planning, crash time, resource constraint PER, maintenance job shop dispatching rule, computer application in maintenance.

Course Objectives:

Upon successful completion of this course, the delegates will be able to:

- Apply an advanced knowledge on maintenance planning, scheduling and work control
- Identify the functions classifications of equipment maintenance and techniques that includes run-to-failure, interval based maintenance, predictive maintenance-condition maintenance, proactive maintenance and reliability based maintenance
- Define advanced maintenance management and its organization
- Discuss total productive maintenance, Maintenance Planning and Techniques of building maintenance planning and scheduling
- Understand the planning of spare parts such as maintenance material control and materials requirements planning
- Employ and conduct auditing process in maintenance
- Use maintenance audit for internal benchmarking
- Apply computer maintenance management system

Who Should Attend?

This course is highly recommended to all maintenance engineering and technical support staff including planner, scheduler, supervisors and technician. The program is highly interactive with many discussion and computer application practice sessions.

Course Outline:

Introduction to Maintenance

- Function of maintenance
- Concept and necessity
- Basic maintenance resources

Classification of Equipment Maintenance and Techniques

- Run-To-Failure
- Interval Based Maintenance
- Predictive Maintenance- Condition Maintenance
- Proactive maintenance
- Reliability based maintenance RBM

Definition of Advanced Maintenance Management

- Maintenance Managers/Supervisors roles
- Objectives of Maintenance Management
- Maintenance concepts in the middle east

The Maintenance Organization

- Building and Leading Team for an Effective Maintenance

Total Productive Maintenance (TPM)

- Strategies for TPM
- Implementing TPM Action Plans

Maintenance Planning

- Benefits and Tools of Maintenance Planning
- The Maintenance Budget

Techniques of Building Maintenance Planning and Scheduling

- Prioritization of maintenance jobs
- Failure classification
- Potential failure
- Planning huge overhauls
- Equipment replacement

Planning of Spare Parts

- Maintenance material control
- Materials requirements planning (MRP)

Continuous Improvement in Maintenance

- The Maintenance Auditing Process
- Maintenance Auditing Methodology
- Conducting a Maintenance Audit

Using the Maintenance Audit for Internal Benchmarking

- Measuring and Evaluating Maintenance Performance

- Maintenance Key Performance Indicators

Computer Maintenance Management System

- Operational maintenance
- Outsourcing
- Work order and work request creation
- Shutdown management (Pre-shutdown works, Shutdown execution, Post-shutdown, Execution)

The Maintenance Store

Equipment Performance & Reliability

Course Fees:

To be advised as per the course location. This rate includes participant's manual, Hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Methodology:

A variety of methodologies will be used during the course that includes:

- (30%) Based on Case Studies
- (30%) Techniques
- (30%) Role Play
- (10%) Concepts
- Pre-test and Post-test
- Variety of Learning Methods
- Lectures
- Case Studies and Self Questionnaires
- Group Work
- Discussion
- Presentation

Course Timings:

Daily Course Timings:

08:00 - 08:20	Morning Coffee / Tea
08:20 - 10:00	First Session
10:00 - 10:20	Coffee/Tea/Snacks
10:20 - 12:20	Second Session
12:20 - 13:30	Prayer Break & Lunch
13:30 - 15:00	Last Session