



**Maintenance Planning, Process  
Engineering & Instrumentation**



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# Course: Maintenance Management: Developing & Enhancing Maintenance Strategies

Code	City	hotel	Start	End	price	Hours
546	Brussels (Belgium)	Hotel Meeting Room	2024-07-01	2024-07-12	8450 €	50

## INTRODUCTION

This 10-day programme initially looks at all of the core maintenance management disciplines that support effective work planning, scheduling and work control. The second week builds on the foundation knowledge introduced during the first week by introducing participants to Maintenance Auditing and Benchmarking. These key tools can be used to ensure the core disciplines are maintained, to drive improvement, identify best practices, and assist with the formulation of strategies.

**This programme will cover:**

- Modern Maintenance Management Practices
- Maintenance Policies and Logistics Planning
- Failure Management
- Work Planning, Scheduling and Control
- Information and Performance Management
- Maintenance Auditing & Benchmarking
- Performance Measurement

## WHO SHOULD ATTEND?

Professionals who are involved in maintenance planning, scheduling and work control, including planners and users of CMMS. Also, any stakeholders in the Work Planning function would benefit from attending this programme

## PROGRAMME OBJECTIVES

Leading industrial organizations are evolving away from reactive ("fix-it-when-it-breaks") management into predictive, productive management ("anticipating, planning, and fix-it-before-it-breaks"). This evolution requires well-planned and executed actions on several fronts.

**You will:**

- Identify planning best practices and key elements for taking action on them



- Understand how world-class organizations solve common planning problems
- Evaluate your practices compared to those of others
- Improve the use of your information and communication tools
- Improve productivity through use of better, more timely information
- Create and preserve lead-time in work management and use it for planning and scheduling resources
- Improve consistency and reliability of asset information
- Achieve more productive turnarounds
- Optimize preventive and predictive maintenance strategies
- Audit your maintenance operations
- Learn how to conduct a benchmarking study
- Use the results to develop and improvement strategy
- Establish Auditing and Benchmarking as a key element of the maintenance strategy

The programme will impart an understanding of how such techniques can be applied as part of a broad systematic approach to proactively managing and improving maintenance

## TRAINING METHODOLOGY

Facilitated by experienced maintenance specialists, this programme will be conducted as highly interactive work session, encouraging participants to share their own experiences and apply the programme material to real-life situations. Case studies from different industries will be investigated. Programme size will be limited to 30 delegates in order to stimulate discussion and efficiency of subject coverage. Each delegate will receive an extensive reference manual, as well as case studies, while worked out solutions will be handed out to the delegates on conclusion of group discussions.

To ensure the concepts introduced during the programme are understood, they will be reinforced through a mix of learning methods, including lecture style presentation, open discussion, case studies, simulations and group work.

## PROGRAMME SUMMARY

**Week 1** of the programme deals with the essential principles and techniques for effective maintenance management, covering proven techniques for the development of an effective maintenance plan, the planning, scheduling and control of maintenance work, and management reporting and analysis

**Week 2** of the programme covers the use and application of a standardised maintenance management audit methodology, consistent with the recognised maintenance excellence framework, to assess the current state of maintenance management strategy implementation, and identify opportunities for improvement. Similarly, participants will learn how to plan, conduct and interpret the results of a maintenance benchmarking study to drive improvement of their maintenance management systems.

## PROGRAMME OUTLINE



## **DAY 1 - MODERN MAINTENANCE MANAGEMENT PRACTICE IN PERSPECTIVE**

- Maintenance Practice in Perspective
  - Maintenance in the Business Process
  - Evolution in Maintenance Management
  - The Contribution of Maintenance to the achievement of the Business Objectives
  - Business, Operations and Maintenance Key Performance Area
  - The Maintenance Objective
  - Roles and Accountability



## **DAY 2 - MAINTENANCE POLICIES AND LOGISTICS PLANNING**

- - Equipment Classification and Identification
    -
  - Functional Location
    -
  - Equipment Type Classification
    -
  - Equipment Identification
    -
  - Part Number and Bill of Material
    -
  - Documentation Structures
    -
  - Document Identification and Classification
    -
- - Maintenance Management Policies
    -
  - Equipment Criticality Grading
    -
  - Job Record Policy
    -
  - Job Information Requirements
    -
  - Principles of Work Order Design
    -
  - Maintenance Work Prioritisation
    -
- - Maintenance Logistics Planning
    -
  - Logistic Support Analysis
    -
  - Maintenance Task Detail Planning
    -
  - Maintenance Work Estimating
    -
  - Maintenance Levels
    -
  - Support Documentation
    -
  - Support Equipment
    -
  - Personnel and Organisation



### **DAY 3 - FAILURE MANAGEMENT PROGRAMME DEVELOPMENT**

- - Failure Modes, Effects and Consequences
    -
  - Equipment Functions and Performance Standards
    -
  - Functional Failures
    -
  - Failure Modes
    -
  - Failure Effects
    -
  - Consequences of Failure
    -
  - Failure Management Policies
    -
  - Age Related Failure Patterns
    -
  - Random Failure Patterns
    -
  - Routine Restoration and Discard Tasks
    -
  - Routine Condition-based Tasks
    -
  - Failure-finding Tasks
    -
  - The application of RCM in the Development of Failure Management Policies
    -
  - Implementing Failure Management Policies
    -
  - Proposed Routine Maintenance Tasks
    -
  - Categorising and structuring Routine Maintenance Tasks
    -
  - Corrective Maintenance Planning
    -
  - Logistic Requirements Planning



#### **DAY 4 - WORK PLANNING, SCHEDULING AND CONTROL**

- Definition of Notifications, Defects, Deviations
- Notification Process, Roles and Principles
- Prioritising Notifications
- Weekly Master Schedule
  -
- Master Schedule Objectives
  -
- Categorise the Outstanding Workload
  -
- Determine Resource Availability
  -
- Determine Equipment Non-utilisation Profile
  -
- Develop Draft Master Schedule
  -
- Conduct Master Schedule Review Meeting
  -
- Final Master Schedule and Implementation
  -
- Backlog Management



#### **DAY 5 - INFORMATION AND PERFORMANCE MANAGEMENT**

- Management and Information
  - Information and Control
  - Management Levels and Information
- Performance Indicators
  - Performance Indicators
  - Workload Performance Indicators
  - Planning Performance Indicators
  - Effectiveness Performance Indicators
  - Cost Performance Indicators
  - Management Reports

#### **DAY 6 - INTRODUCTION AND FOUNDATION CONCEPTS**

- Introduction to Auditing and Benchmarking
- Introduction to Maintenance Processes
- Approaches to Maintenance Management and Improvement
- Introduction to Maintenance Management Benchmarking Frameworks

#### **DAY 7 - MAINTENANCE AUDITING**

- Maintenance Performance Measures and Metrics
- The Maintenance Auditing Process
- Maintenance Auditing Methodology
- Conducting a Maintenance Audit
- Maintenance Audit Simulation Case Study





### **DAY 8 - MAINTENANCE AUDITING AND BENCHMARKING**

- Maintenance Audit Simulation Case Study
- Using Maintenance Audit Results to Plan Improvement Strategies
- Introduction to Benchmarking
- The Maintenance Benchmarking Process
- Maintenance Benchmarking Methodology
- Benchmarking Tools and Techniques

### **DAY 9 - MAINTENANCE BENCHMARKING AND PERFORMANCE MEASUREMENT**

- Benchmarking Tools and Techniques (continued)
- Designing and Preparing for a Benchmarking Study
- Selecting Benchmarking Partners
- Preparing for an conducting the benchmarking visit
- Reporting results of Benchmarking and Auditing Studies
- The DMG Analysis - Advanced Benchmarking Conducting a Maintenance Benchmarking Study

### **DAY 10 - AUDITING, BENCHMARKING AND MAINTENANCE IMPROVEMENT**

- Benchmarking Simulation Case Study
- Integrating Benchmarking resulting into improvement and objective setting processes
- Integrating Maintenance Auditing and Benchmarking into the Performance Measurement System to establish improvement objectives and strategies
- Review of Best Practice Benchmarks and Case Studies
- Conclusion



**The Scandinavian Academy employs modern methods in training and skills development, enhancing the efficiency of human resource development. We follow these practices:**

- **Theoretical Lectures:**
  - We deliver knowledge through advanced presentations such as PowerPoint and visual materials, including videos and short films.
- **Scientific Assessment:**
  - We evaluate trainees skills before and after the course to ensure their progress.
- **Brainstorming and Interaction:**
  - We encourage active participation through brainstorming sessions and applying concepts through role play.
- **Practical Cases:**
  - We provide practical cases that align with the scientific content and the participants specific needs.
- **Examinations:**
  - Tests are conducted at the end of the program to assess knowledge retention.
- **Educational Materials:**
  - We provide both printed and digital scientific and practical materials to participants.
- **Attendance and Final Result Reports:**
  - We prepare detailed attendance reports for participants and offer a comprehensive program evaluation.
- **Professionals and Experts:**
  - The programs scientific content is prepared by the best professors and trainers in various fields.
- **Professional Completion Certificate:**
  - Participants receive a professional completion certificate issued by the Scandinavian Academy for Training and Development in the Kingdom of Sweden, with the option for international authentication.
- **Program Timings:**
  - Training programs are held from 10:00 AM to 2:00 PM and include buffet sessions for light meals during lectures.