



SCANDINAVIAN ACADEMY
For Training and Development



Course: Advanced Training in Computerized Maintenance Management Systems (CMMS)

Code	City	Hotel	Start	End	Price	Language - Hours
MA-922	Manama (Bahrain)	Hotel Meeting Room	2026-04-12	2026-04-16	3450 €	En - 25

Introduction:

This advanced CMMS training course is designed to equip professionals with strategic insights and practical skills for implementing and optimizing Computerized Maintenance Management Systems (CMMS). It is tailored for participants seeking to enhance the efficiency, automation, and reliability of their maintenance operations through digital transformation.

The course provides a deep understanding of the current state of maintenance practices within organizations and explores how CMMS can bridge performance gaps, streamline workflows, and increase asset visibility. It highlights how a well-integrated CMMS enables better planning, scheduling, and tracking of maintenance activities.

Participants will learn how to leverage CMMS tools to:

- Improve preventive maintenance execution,
- Minimize unplanned downtime,
- Optimize spare parts and inventory management,
- Prolong asset life,
- And ensure compliance with safety and regulatory standards.

By mastering the core functionalities and advanced capabilities of CMMS platforms, attendees will be able to fully integrate the system into their maintenance strategy, enabling data-driven decision-making and continuous improvement across operations.

A CMMS is not just a software application—it is a critical tool that maintains a



centralized database of maintenance information. It empowers maintenance teams to perform tasks more effectively and allows management to make informed, strategic decisions based on real-time data.

General Objective:

To enable participants to strategically implement, manage, and optimize a Computerized Maintenance Management System (CMMS) in order to enhance maintenance efficiency, improve asset reliability, reduce operational costs, and support data-driven decision-making across maintenance operations.

Course Objectives:

- Provide a broad understanding of maintenance and its relevant aspects.
- Understand how to select each asset's most cost-effective maintenance strategy to control risks and costs.
- Offer a comprehensive view of the importance, objectives, and benefits of maintenance planning and scheduling to save time and cost and efficiently utilize maintenance resources to maximize manpower productive time.
- Explain the fundamentals of planning and scheduling, such as concepts, processes, tools, techniques, methodologies, roles, responsibilities, KPIs, analysis, and reporting.
- Discuss the crucial role and functions of the CMMS as a primary tool for Maintenance Planning and Scheduling.
- Detail the planning, scheduling, and work management processes.
- Work identification and prioritization, work requests/orders, quality control, scheduling meetings, materials and logistics, work coordination, resource preparations and utilization, safety aspects of work execution, work order completion, backlog management, maintenance performance measuring (KPIs), work orders closing, history data analysis for enhancement, and closing the feedback loop.
- Highlight the importance of Spare parts and Inventory Management.



- Give an overview of Project Management techniques as important Maintenance Planning and Scheduling tools.
- Emphasize the types of KPIs (leading and lagging), main maintenance and planning KPIs, and benchmarking against world-class best practices.
- Engage in interactive sessions, reviewing Interactive Computer Maintenance Planning and Management Systems with the opportunity for practical sessions using laptop computers.

Targeted Groups:

- This computerized maintenance management system (CMMS) course targets all companies interested in utilizing computer maintenance planning and management systems.
- Maintenance Managers.
- Maintenance Supervisors, Maintenance Engineers.
- Purchasing Managers.
- Maintenance Planning and Scheduling Engineers.
- Maintenance Team Leaders.

Targeted Competencies:

- Maintenance Planning (Planners, Schedulers, Engineers, Leaders, and Managers).
- Maintenance (Engineers, Supervisors, Section Leaders, Team Leaders, and managers).
- Reliability (Engineers, Section Leaders, Team Leaders, and Managers).
- Integrity (Engineers, Section Leaders, Team Leaders, and Managers).
- Operation (Engineers, Section Leaders, Team Leaders, and Managers).

Course Outline:



Day 1: Understanding Maintenance First (What We Plan and Schedule):

- Introduction and Pre-evaluation.
- Where is Maintenance in the Big Picture?
- Main Maintenance Types and Strategies.
- Reactive Maintenance.
- Run to Failure Maintenance.
- Corrective Maintenance.
- Preventive Maintenance (PM).
- Condition Based Maintenance (CBM).
- Predictive Maintenance (PdM).
- AI and IoT applications in modern CMMS platforms
- Failure case studies: reasons for unsuccessful CMMS implementations
- Mapping CMMS to digital transformation roadmaps in asset-intensive industries

Day 2: Methods and Tools in Maintenance & Understanding Maintenance

Planning and Scheduling:

- Maintenance Strategy Selection Methodology.
- Asset Criticality Assessment/Analysis as a key tool for Maintenance Strategy selection.
- Understanding Maintenance Planning and Scheduling.
- Definitions.
- Difference between Planning and Scheduling.
- Main Objectives of Maintenance Planning and Scheduling.
- Maintenance Planning and Scheduling Process.
- The Six Maintenance Planning Principles.
- Explore the Role of the Maintenance Planner.
- The Six Maintenance Scheduling Principles.
- The Role of the Maintenance Scheduler.
- Necessary Elements for Planning and Scheduling.
- Planning System Necessities.



- Workflow customization: multi-stage and conditional work orders
- Integration of barcoding/RFID for inventory and spare parts tracking
- Advanced configuration of asset hierarchies and dependencies

Day 3: Maintenance Planning and Scheduling, CMMS & Work Management:

- Tools Necessary for Effective Maintenance Control System.
- CMMS is a main Maintenance Planning, Scheduling, and Work Management tool.
- Differences between CMMS and AMS/EAM.
- Objectives and benefits of CMMS.
- Main modules and functions of CMMS.
- CMMS Failure Codes.
- Work Management.
- Backlog Management.
- Predictive maintenance using condition-monitoring data (vibration, thermal, etc.)
- Automated scheduling algorithms and their configuration in CMMS
- Integration of CMMS with SCADA and DCS systems for real-time alerts

Day 4: Turn Maintenance into a Profit Center:

- The Maintenance Image.
- Cost Center versus Profit Center Approach.
- How to Turn Maintenance into a Profit Center?
- How can a CMMS help?
- Profit-Driven Maintenance (PDM).
- Optimum Reliability Allocation.
- Cost/Feasibility Functions.
- Determining Component Reliabilities.
- Specifying Component Reliabilities.
- Availability Definitions.
- Introduction of Maintainability.
- Designing custom KPIs and dashboards using CMMS analytics tools
- Root cause analysis using historical CMMS datasets



- Linking CMMS data with BI tools (e.g., Power BI) for strategic insights

Day 5: Advanced Simulation Options:

- Register a new maintenance task in the CMMS.
- View And modify an existing maintenance task.
- Create a maintenance schedule master.
- Modify and view an existing maintenance schedule.
- Generate CMMS reports.
- CMMS-ERP integration challenges (e.g., SAP/Oracle) and data synchronization
- Advanced data migration techniques and legacy system conversion
- Case studies of mobile CMMS implementation with role-based access control



The Scandinavian Academy for Training and Development adopts the latest scientific and professional methodologies in training and human resource development, aiming to enhance the efficiency of individuals and organizations. Training programs are delivered through a comprehensive approach that includes:

- Theoretical lectures supported by PowerPoint presentations and visual materials (videos and short films).
- Scientific evaluation of participants before and after the program to measure progress and knowledge acquisition.
- Brainstorming sessions and practical role-playing to simulate real-life scenarios.
- Case studies tailored to align with the training content and participants work nature.
- Assessment tests conducted at the end of the program to evaluate the achievement of training objectives.

Each participant receives the training material (both theoretical and practical) in printed form and saved on a CD or flash drive. Detailed reports, including attendance records, final results, and overall program evaluations, are also provided.

Training materials are prepared professionally by a team of experts and specialists in various fields. At the end of the program, participants are awarded a professional attendance certificate, signed and accredited by the Scandinavian Academy for Training and Development.

Program Timings:

- 9:00 AM to 2:00 PM in Arab cities.
- 10:00 AM to 3:00 PM in European and Asian cities.

The program includes:

- A daily buffet provided during the sessions to ensure participants comfort.