Online Certificate in Computerized Maintenance Management System (CMMS) Implementation and Optimization

Description

More than half of all new Computerized Maintenance Management System (CMMS) implementations fail to result in a positive return on investment. In this online, on-demand course, you will learn the objectives, benefits, and basic/advanced features of a CMMS. You will also discover how to develop system specifications based on your individual needs and how to justify, evaluate, implement, audit and optimize your CMMS to result in a positive return on investment.

Learning Objectives

- Assemble the information necessary to choose, install and use a CMMS
- Evaluate the use of a CMMS for your facility
- Explain the uses, data, and the importance of completeness and accuracy of your work orders
- Support good planning and scheduling practices.
- Manage spare parts and inventories for maintenance.
- Understand how to get the right information to the right person in a timely manner and how to set this up in the CMMS
- Learn the steps of implementing a CMMS.
- Learn how to shop for and evaluate a CMMS

Who Should Enroll?

This comprehensive class will introduce the general capabilities of modern CMMS and is designed for several distinct groups of attendees:

- Maintenance departments that are searching for a suitable CMMS

- Maintenance departments that want to upgrade their system or restart their system

- Maintenance professionals (planners, supervisors, managers) that want to increase their expertise of their CMMS

- Maintenance support professionals (stockroom, engineering, accounting) that want to increase their knowledge on CMMS

- IT professionals charged with supporting, acquiring or building CMMS

- CMMS vendors

  - Salespeople who need to understand system requirements and use

  - Programmers and analysts who need background training

- Consultants that want to add value to their offerings or train junior associates

Complete Course Outline

Session 1: Introduction to CMMS and Managing Maintenance

- Learn the role of a CMMS
- Appreciate the roles and responsibilities of the function of maintenance
- Learn how to manage risk
- Evaluate the cost of downtime
- Learn how deferred maintenance ruins your ability to carry out your mission
- Determine the culture of maintenance and its impact
- Learn why we design with defense in depth
- Learn the basics of maintenance planning and scheduling
- Determine where PM fits into good maintenance practice
- Measure maintenance effectiveness

Session 2: Work Orders

- Learn how the work order is the core of the CMMS
- Explain the use of the work order
- Restate the fields necessary for a complete analysis of repairs
- Learn enough elements to design a class for work orders

Session 3: CMMS and Planning and Scheduling

- Know where to look for job planning in your CMMS
- Manage the 13 elements of planning in the CMMS
- Know how to prepare a simple job plan
- Build your planner library and catalog
- Use the work order to update the job plan
- Understand shop scheduling
- Use drag and drop scheduling

Session 4: Parts, Stores, Purchasing

- Explain Point of View as it refers to success in stores
- Understand types of inventory
- Design a parts stores room
- Organize parts systems
- Conduct a short audit of the parts area
- Calculate statistical inventory control points
- Learn how to cut costs on the shelf
- Understand service level and conjunctive probability
- Conduct a physical inventory

Session 5: Preventive and Predictive Maintenance (PPM)

- Understanding the purpose of PPM
- Identify the elements of PPM in a CMMS
- Ensure PPM has appropriate feedback to corrective maintenance
- Use the CMMS to optimize the PPM tasking
- Learn where to find PPM task lists

Session 6: Reporting, Analytics, and Metrics

- Understand the data collected and what metrics help you manage maintenance
- Diagram high tech data flows
- Evaluate the data integrity and it impact on metrics and reports
- Identify opportunities for IIoT sensors
- Identify prepackaged AI for common assets
- Investigate a problem using protocols

Session 7: CMMS Justification

- Know where you can expect a Return on Investment (ROI) from a CMMS
- Identify other benefits of a CMMS
- Learn how to appeal to an audience (when discussing a CMMS) based on their concerns
- Distinguish phantom versus real savings

Session 8: CMMS Evaluation

- Decide what features you need in a CMMS
- Understand what sub-systems are generally available and what they do
- Learn what reports to look for
- Learn what data structures are important

Session 9: CMMS Marketplace

- Become familiar with the current CMMS offerings
- Understand the issues of Internet-based systems
- Understand the arguments for and against in-house development of a CMMS

Session 10: Implementation - Configuration of CMMS, Asset Hierarchy, Reporting Hierarchy, Security

- Understand the steps to implement a CMMS
- Discuss the configuration decisions that will have to be made
- Know how to proceed to build master files

Certificate Requirements

The homework for this class is a complete CMMS assessment executed over the 10 modules. There is an assignment after each module, and the final project is to turn in the completed materials for the instructor to evaluate. Participants have up to six months after enrolling to finish the course. The entire course is comparable to three days of seminar training. Therefore, the certificate will state that the recipient has earned 2.4 Continuing Education Units (CEUs) or 24 Professional Development Hours (PDHs). However, the course does not carry any college credits and cannot be used as part of a degree-seeking program.

Course Materials

In addition to the course materials that are available in the course website, attendees have access to an online library of maintenance and reliability textbooks. These are the main titles that will be used for class assignments:

- Handbook of Maintenance Management by Joel Levitt
- Complete Guide to Preventive and Predictive Maintenance by Joel Levitt
- Maintenance Planning, Coordination and Scheduling by Don Nyman and Joel Levitt
- Surviving the Spare Parts Crisis by Joel Levitt

Course Delivery

The course is delivered over the University of Kansas learning management system. You will receive login instructions when you register. You can register and start at any time and will have up to six months to complete the course. Each learning session includes:

- A short introductory video about the topic and where it fits in
- A 5-15-page workbook (optional)
- PowerPoint lecture notes
- Videos of the lesson
- The specific assignment to build your personal CMMS binder.
- Other reading, links, articles, videos, etc.

Instructor

Joel Levitt is a leading trainer of maintenance professionals. He has conducted over 500 training sessions for more than 15,000 maintenance leaders from 3,000 organizations in more than 20 countries. Since 1980 he has been the president of Springfield Resources, a management consulting firm that services clients of all sizes on a wide range of maintenance issues.

Joel has 25 years of experience in many facets of maintenance, including as a source equipment inspector, electrician and field service technician, and in process control design, maritime

operations, and property management. Prior to that, he worked for a CMMS vendor and as an owner/manager in manufacturing.

Joel is a frequent speaker at maintenance and engineering conferences and has written 10 popular maintenance management texts. He served on the safety board of ANSI and on the executive committee of the Miquon School. Joel is a member of AFE and the Vice President of the Philadelphia chapter.

Refund and Cancellation Policy

No refunds will be granted for this class once the student has accessed the Blackboard class site. A full refund of registration fees, less a $30 administrative fee, will be approved if requested in writing prior to accessing the course. Requests must be made within 60 days of payment.