Maintenance Management Online Certificate Course

Participants in this training program will learn:

- When to outsource
- How and when to in-source
- Planning and scheduling maintenance jobs to improve productivity
- How to make PM (Preventive Maintenance) work for you
- Ideas to manage the stockroom
- How to improve uptime
- How to insure the PM tasks are done as designed and how to design them
- Choosing and using contractors (as a competitive advantage)
- Maximizing benefits from your CMMS (Computerized Maintenance Management System)
- Ways to reengineer maintenance that enhance quality, safety, environmental security and uptime
- How to use financial modeling of maintenance alternatives
- Basics of RCM (Reliability-centered maintenance)
- How to use high technology inspections to make an impact

Module 1 — Introduction to Managing Maintenance

(This module is based on The Handbook of Maintenance Management, Second Edition by Joel Levitt, published by Industrial Press, NY)

Session 1 - Evaluating Your Operation

- Introducing assessment tools
- Identifying dominant patterns in departments

Session 2 - Maintenance Metrics and KPIs (Key Performance Indicators)

- Understanding formulas, measures, and techniques to evaluate effort
- Anticipating maintenance efforts

Session 3 - CMMS (Computerized Maintenance Management System)
Module 2— Planning and Scheduling Maintenance Activity

(This material is based on Maintenance Planning, Coordinating and Scheduling, Second Edition by Don Nyman and Joel Levitt, published by Industrial Press, NY)

Session 1 — What is planning and why plan maintenance jobs?
- How to sell planning & scheduling to your management
- Where does the ROI (Return on Investment) come from?
- The nature of maintenance activities
- Metrics of planning and scheduling

Session 2 — Planning
- What are the steps in effective planning?
- Job safety analysis (JSA)
- Complete description of the planner’s job
- The complete planning process

Section 3 — Estimating, Crew Size & Manpower Requirements
- Estimation and slotting
- What are the contents of a complete planned job package?

Section 4 — Preparatory activity to scheduling
- Calculating available hours from maintenance workers
- Coordination with operations and coordination meeting

Section 5 — Scheduling Maintenance Work
- Job loading until available hours are used up
- Create a credible schedule that takes all the constraints into account
- Job execution and feedback with job closeout and follow-up

Module 2 Exam
KU Continuing Education delivers high-quality programs to every corner of the globe. We use traditional classroom settings, interactive voice conferencing and cutting-edge online education technology. We provide development and training for working professionals, and Independent Study online courses for both KU credit and noncredit programs. Our courses are designed by KU faculty and industry experts for excellence, convenience, and flexibility to advance your personal and professional academic goals.

Module 3— Preventive and Predictive Maintenance

(This material is based on *Maintenance Planning, Coordinating and Scheduling*, Second Edition by Don Nyman and Joel Levitt, published by Industrial Press, NY)

Section 1 — Basic Understanding of PM (Preventive Maintenance)

- True breakdown costs
- Past sins
- What is PM?
- Understanding what PM is supposed to accomplish and the critical event
- Maintenance improvement curve
- Short repairs and high productivity
- Four types of task lists
- PM frequency and its effect on breakdown

Section 2 — TLC (Tighten, Lubricate and Clean)

Section 3 — Guidelines for involvement with predictive techniques

- P-F Curve
- Questions to ask before PdM (Predictive Maintenance)
- Oil analysis
- Vibration analysis
- Temperature measurement
- Ultrasonic inspection

Section 4 — Reliability enhancement programs

- RCM (Reliability Centered Maintenance)
- PMO
- Task list development

Section 5 — Management of PM activity

- Access to equipment
- Interruptive maintenance and non-interruptive maintenance
- Metrics
- Outsourcing PM

Module 3 Exam