Tel No:+97126654546 | Fax No:+97126654182 | Email: training@cmc-me.com | www.cmc-me.com

ME239:
Certificate in Maintenance Task Analysis (MTA)

Training Description:

Maintenance Task Analysis (MTA) is a systematic methodology used to identify, evaluate, and optimize maintenance activities required to preserve asset functionality, reliability, safety, and cost efficiency. This training course provides participants with the knowledge and practical skills required to analyze maintenance requirements, define appropriate tasks, eliminate unnecessary work, and align maintenance strategies with operational objectives.

The training course bridges the gap between maintenance theory and real-world implementation by integrating reliability principles, failure analysis, criticality assessment and maintenance optimization techniques. Participants will learn how to develop structured maintenance programs that reduce downtime, improve equipment performance, and enhance lifecycle asset management.

This highly practical training course combines lectures, guided workshops, case studies and hands-on exercises to ensure participants can immediately apply Maintenance Task Analysis techniques within their organizations.

Training Objectives:

By the end of the training, participants will be able to:

- ✓ Understand the principles and purpose of Maintenance Task Analysis
- ✓ Identify functional failures and failure modes
- ✓ Apply structured approaches to task selection
- ✓ Distinguish between preventive, predictive, and corrective maintenance tasks
- ✓ Conduct failure consequences evaluation
- ✓ Perform asset criticality assessment
- ✓ Optimize maintenance intervals and frequencies
- ✓ Eliminate redundant or ineffective maintenance activities
- ✓ Align maintenance programs with reliability and business objectives
- ✓ Improve asset performance while controlling maintenance costs

Training Designed for:

This training course is intended for professionals involved in asset management, maintenance planning, reliability, and operations, including; Maintenance Engineers, Reliability Engineers, Asset Management Professionals, Maintenance Planners & Schedulers, Operations Engineers, Plant / Facility Engineers, Technical Supervisors, Maintenance Managers, CMMS / EAM Specialists and Anyone responsible for equipment performance and maintenance strategy.

Training Requirement:

"Hands on practical sessions, equipment and software will be applied during the course if required and as per the client's request."

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client's learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Tel No:+97126654546 | Fax No:+97126654182 | Email: training@cmc-me.com | www.cmc-me.com

Training Program:

DAY ONE:

- ❖ Foundations of Maintenance Task Analysis
  - Introduction to Maintenance Task Analysis\Maintenance challenges in modern organizations
  - Maintenance philosophies and evolution
  - Reactive vs Preventive vs Predictive Maintenance
  - Relationship between MTA, RCM, and Asset Management
  - Understanding asset functions and performance standards
  - Functional failures vs equipment failures
  - Maintenance objectives and performance drivers
- ❖ Workshop / Exercise:
  - Identifying asset functions and failure definitions
  - Maintenance strategy gap analysis

DAY TWO:

- ❖ Failure Analysis & Task Identification
  - Failure mechanisms and degradation processes
  - Functional Failure Analysis
  - Failure Modes & Effects Analysis (FMEA) fundamentals
  - Identifying failure modes and causes
  - Failure consequences classification
  - Hidden failures and protective functions
  - Introduction to task selection logic
  - Types of maintenance tasks
  - Detecting vs preventing vs correcting failures
- ❖ Workshop / Exercise:
  - Conducting FMEA for selected equipment
  - Mapping failure modes to maintenance tasks

DAY THREE:

- ❖ Task Selection & Maintenance Optimization
  - Maintenance task selection logic
  - Preventive maintenance task criteria
  - Predictive / condition-based maintenance decisions
  - Failure-finding tasks
  - Run-to-failure justification
  - Evaluating technical feasibility
  - Evaluating economic feasibility
  - Determining task intervals
  - Optimizing maintenance frequency
  - Reducing over-maintenance

- ❖ Workshop / Exercise:
  - Task decision analysis scenarios
  - Maintenance interval optimization exercise

DAY FOUR:

- ❖ Asset Criticality & Risk-Based Maintenance
  - Asset criticality analysis concepts
  - Risk-based maintenance strategies
  - Consequence of failure assessment
  - Probability vs impact evaluation
  - Criticality ranking models
  - Resource prioritization
  - Linking criticality to maintenance plan
  - Maintenance workload balancing
  - Reliability-centered decision-making
- ❖ Workshop / Exercise:
  - Developing an asset criticality matrix
  - Maintenance prioritization simulation

DAY FIVE:

- ❖ Implementation & Continuous Improvement
  - Developing structured maintenance programs
  - Integrating MTA with CMMS / EAM systems
  - Maintenance documentation & task standardization
  - Key performance indicators (KPIs) for maintenance
  - Measuring maintenance effectiveness
  - Continuous improvement strategies
  - Eliminating ineffective maintenance tasks
  - Cost vs reliability trade-offs
  - Organizational challenges & change management
  - Best practices & real-world case studies
- ❖ Workshop / Exercise:
  - Building a Maintenance Task Analysis framework
  - Implementation roadmap development
- ❖ Course Conclusion
- ❖ POST-ASSESSMENT and EVALUATION

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Fees:

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

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:

Aisha Relativo - Training & Career Development Manager
aisha@cmc-me.com / training@cmc-me.com
Tel.: +971 2 665 3945 or +971 2 643 6653 | Mob.: +971 52 2954615