Maintenance Engineering

ABOUT THE COURSE

We recognise that your business could have a diverse level of maturity in terms of understanding and implementation of maintenance. Therefore, we have designed this 5-day program for managers and engineering to enable the implementation of the fundamental concepts and tools which lead to improved plant reliability and availability. This course includes practical case studies and industry best practice.

WHO SHOULD ATTEND

- Plant Managers
- Maintenance Managers
- Engineers
- Engineering Managers
- O&M Managers

MAIN LEARNING OBJECTIVES

- Basic understanding of statistics of component failure, data collection and implications of a maintenance policy.
- How reliability engineering is applied in maintenance.
- Current performance and best practice.
- Case studies – Learning from industry experience.
- How to manage defects and reduce errors.
- Applying RCA in practice.
- How to identify gaps using maintenance audits and developing improvement plans.
- Effective feedback to enable continuous improvement.
- Familiar with maintenance concepts such as TPM, RBI, BCM, CBM and RCM.
- Analyse system reliability utilising graphical techniques such as Weibull analysis.
- Setting Key Performance Indicators (KPI) linked to strategic needs.
- Make relevant decisions in response to the undertaken reliability analysis.

DURATION, PREPARATION & MATERIAL

This is a 5-day course that will include practical exercises and an assessment. Copies of the programme materials will be provided and delegates will receive a certificate of attendance upon successful programme completion.

PROGRAMME CONTENT

Day 1

- Business Context
- Maintenance Policy
- Equipment Criticality
- Risk management
- Equipment Failure
- Failures Modes Effects Analysis - FMEA(C)A

Day 2

- Reliability and Availability
- Reliability Block Diagram
- Weibull Analysis
- Selecting the correct maintenance strategy using DMG

Day 3

- Work Management
- Shutdown - Planned and Unplanned
- Contractor Management
- Maintenance Competency

Day 4

- Root Cause Analysis
- Plant and Process Safety
- Bow-Tie Assessment

Day 5

- Maintenance errors and human factors
- Maintenance Performance Indicators
- Maintenance Audits and Review

ASSESSMENT & CERTIFICATION

Assessment: End-of-course examination.

Certification: Certificate awarded on successful completion of the course.