

## **SSM 119: Maintenance Management & Technology**

### **COURSE OVERVIEW**

Maintenance is a tough, challenging activity. Are you under pressure to reduce costs and plant downtime? Does a constant stream of breakdowns stop you making the improvements you want? Are your requests for investing in new equipment sometimes refused? Then this course is for you because it describes the fundamental principles behind good maintenance management.

### **COURSE OBJECTIVES**

#### **By the end of this program, participants will be able to:**

- Transfer Knowledge to assist with the implementation of maintenance best practice
- Provide information to assist the company to reduce maintenance costs
- Provide knowledge for the implementation of maintenance techniques to avoid failures of plant and equipment
- Apply the proven methodologies and templates which are introduced
- Focus maintenance activities on key areas
- Manage spares more effectively
- Make the right maintenance choices for strategic equipment
- Reduce the impact of plant downtime
- Unlock the true potential of all of their people

### **WHO SHOULD ATTEND**

This course is directed towards newly-appointed senior technicians, senior operators, production supervisors, maintenance supervisors and maintenance engineers who wish to review the critical competencies required for successful cost-effective maintenance activities and gain a broad overall.

### **COURSE OUTLINE**

#### **Introduction and overview of maintenance**

- Introduction to Maintenance and Maintenance Management
- ROI and The Business Case for Good Maintenance
- Asset Effectiveness and Asset Productivity
- Maintenance preconceptions
- Total cost of maintenance

#### **An overview of the field of maintenance management**

- Maintenance Work Management and Work Order Systems
- Computerized Maintenance Systems
- Criticality analysis
- Reliability- centered maintenance – RCM

- Total productive maintenance - TPM

### **Shutdown and Turnaround Management**

- Introduction to Shutdown/Turnaround Management
- Project Management techniques in maintenance
- Shutdown Scope of Work development and planning techniques
- Execution Issues in Shutdown and Turnaround Management

### **Spare parts management**

- The need to reduce lead-time
- Balancing cost & risk in spares parts decisions
- Parts categorization
- Forming alliances with key suppliers
- Excellence in spares management

### **Budgeting, Measuring and Controlling Maintenance**

- Budgeting and Cost Control
- Introduction to Zero Based Budgeting Concepts
- Downtime Monitoring
- Developing the Maintenance "Scorecard"
- Managing Availability

### **Use of information technology**

- Using a computer maintenance management system – CMMS
- Maintenance Codes & Failure Reporting
- Condition-monitoring system
- Reliability systems
- Examples of Data Analysis

### **Advanced Techniques in Maintenance**

- Condition Monitoring based approaches
- Predictive Maintenance
- Implementing CM and Predictive Maintenance
- The future of maintenance management