

MAINTENANCE MANAGEMENT WORKSHOPS

Today's top companies recognise the importance of efficient maintenance systems. They know that poor maintenance can affect safety, productivity, plant availability, the environment, and most importantly, the bottom line.

APMM Group can assist organisations to develop their own maintenance strategies, working in partnership to develop a program that will meet your specific needs.

Each unit is accredited and participants will be awarded a statement of attainment upon successful completion of the unit and its associated workplace assessment.

It is important to provide training to staff as well as management, taking every member of the team to new levels of competency. The workshops offered are constantly updated and can be readily customised to meet the needs of all members of your organisation. You can opt to do the entire program or you may wish to improve specific skills. All the workshops can be conducted as stand alone workshops with each unit being accredited.

There is an increasing demand for formal qualifications in Maintenance Management. Our courses are Nationally Accredited at Certificate IV and Diploma Level. APMM Group is the only Registered Training Organisations in Australia to offer this type of accredited program.

The Maintenance Management workshops include:

CORE WORKSHOPS

- Principles of Maintenance Management
- Scope Management
- Planning and Scheduling Techniques
- Cost Management
- Occupational Health & Safety (Supervisors)
- Maintenance Operations Planning
- Performance Indicators for Maintenance Management
- MS Project Basic / Intermediate

DIPLOMA WORKSHOPS

- The Maintenance Working Environment
- Root Cause Analysis
- Project Human Resources Management
- Managing the Maintenance Inventory
- Reliability Centred Maintenance
- Quality Management

Certificate IV in Maintenance Management

(AQF Level 4): This will be awarded upon successful completion and assessment of all 8 core workshops.

Diploma in Maintenance Management

(AQF Level 5): This will be awarded upon successful completion and assessment of all 14 workshops.



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PRINCIPLES OF MAINTENANCE MANAGEMENT – MM401

OBJECTIVES

To Introduce Managers, Potential Managers, Supervisors and Planners to the skills and competencies required to manage maintenance in their organisations

CONTENTS

Module One – The Development of Maintenance

- The history of maintenance
- The future
- The challenges facing maintenance

Module Two – The Role of Maintenance

- Objectives of Maintenance
- Functions of Maintenance

Module Three – Organisational considerations

- Production versus Productivity
- Where does maintenance fit in your organisations?
- What are the appropriate techniques?
- What inspection/condition monitoring techniques are appropriate?

Module Four – An Overview of Maintenance Methods

- Preventative maintenance
- Planned maintenance
- Elimination and Reduction of maintenance
- Reliability centred maintenance
- Quality Control

Module Five – Good Maintenance Planning Techniques

- Who should be involved?
- What are the needs?
- Planning Techniques
- Computer Systems
- Improving the process

LEARNING OUTCOMES

On completion of this workshop participants will be able to:

- Describe the development and the future challenges faced by maintenance.
- Identify and describe the objectives and functions of maintenance management in their organisation.
- Describe the factors that should be considered in establishing maintenance in an organisation.
- Describe an overview of the various methods available to manage maintenance in an organisation.
- Describe the process and procedures that should be applied in planning maintenance.

DURATION

One day



Units of Competency:

PRDPROD406A Coordinate Maintenance and Repair Properties and Facilities

SCOPE MANAGEMENT – PM02

OBJECTIVES

To provide Project Managers, Project Co-ordinators and other project staff, with the skills required to define and control the work elements included or excluded from a project, in order to ensure its successful completion.

CONTENTS

Module One – Overview

Module Two – Initiation

- Project Authorisation
- Inputs to Initiation
- Tools and Techniques for Initiation
- Outputs From Initiation

Module Three – Scope Planning

- Inputs to Scope Planning
- Tools and Techniques for Scope Planning
- Outputs from Scope Planning

Module Four – Scope Definition

- Inputs to Scope Definition
- Tools and Techniques for Scope Definition
- Outputs from Scope Definition

Module Five – Scope Verification

- Inputs to Scope Verification
- Tools and Techniques for Scope Verification
- Outputs from Scope Verification

LEARNING OUTCOMES

On completion of this workshop, participants will be able to:

- Understand the elements involved in the development and management of project scope.
- Describe the information that is required prior to developing each phase of the scope.
- Discuss the tools and techniques that can be applied.
- Understand the documentary requirements for each phase.

DURATION

One day



Units of Competency:

BSBPMG401A Apply Scope Management Techniques
BSBPMG502A Manage Project Scope

PLANNING AND SCHEDULING TECHNIQUES – PM03

OBJECTIVES

To provide Project Managers, Project Co-ordinators and other project staff with the skills and competencies required to successfully plan and schedule their projects.

CONTENTS

Module One – Planning and Scheduling

- Planning the Project/Task
- What if modelling
- Project Specifications
- Critical Path Method

Module Two – Planning and Scheduling Techniques

- Network analysis
- Analysis of activities in a planning situation
- Drawing up the network
- Testing of network relationships
- Time analysis of the network
- The critical path
- Float and Slack
- Bar charts

Module Three – Cost and Resource Allocation

- Identifying the Costs
- Optimisation of Costs
- Resource Types
- Fast Tracking

Module Four – Completing and Evaluating the Project

- Tracking and analysing trends
- Identifying problems
- Delivering the Output
- Evaluating the process, results, and staff

LEARNING OUTCOMES

On completion of this workshop participants will be able to:

- Plan projects using a defined process.
- Apply techniques to troubleshooting.
- Schedule projects using Gantt charts.
- Use network analysis techniques for scheduling complex projects.

DURATION

One day



Units of Competency:

BSBPMG402A Apply Time Management Techniques
BSBPMG503A Manage Project Time

COST MANAGEMENT – PM04

OBJECTIVES

To provide Project Managers, Project Co-ordinators and other project staff with the skills and competencies required to manage, control and capture costs in their projects.

CONTENTS

Module One – Cost Management Concepts and Estimating

- Overview of Cost Management
- Cost Management as a Process Within Project Management
- Objectives and Principles of Estimating
- Principles of Estimating
- The Impact of Estimating on Price and Profit
- Specifications and Work Breakdown Structures
- Jigsaw Method and use of Checklists
- Estimation Classifications and Techniques
- Use of Standard Formats in Estimating
- Cost Codes
- Influences on Estimates

Module Two – Budget Development and Cost Monitoring

- The Budget Function
- Budget Development
- Elements of a Budget
- Time-phased Budgets
- Budget Allocation
- Methods of Distributing Indirect Costs to Budgets
- Cost Control and Monitoring
- Monitoring Costs and Analysis of Reports
- Variances
- Budget Maintenance
- Project Finalisation

LEARNING OUTCOMES

On completion of this workshop participants will be able to:

- Manage and control project cost
- Develop and estimate project budgets and costs
- Identify the factors that influences project cost management

DURATION

One day



Units of Competency:

BSBPMG403A Apply Cost Management Techniques,
BSBPMG504A Manage Project Costs

OCCUPATIONAL HEALTH AND SAFETY (SUPERVISORS) – OHS01

OBJECTIVES

This unit is concerned with OHS responsibilities of employees with supervisory responsibilities to implement and monitor the organisation's Occupational Health and Safety policies, procedures and programs in the relevant work area to meet legislative requirements.

CONTENTS

Element One – Provide information to the work group about Occupational Health and Safety policies and procedures

Element Two – Implement and monitor participative arrangements for the management of occupational health and safety

Element Three – Implement and monitor the organisation's procedures for providing Occupational Health and Safety training

Element Four – Implement and monitor procedures for identifying hazards and assessing risks

Element Five – Implement and monitor the organisation's procedures for controlling risks

Element Six – Implement and monitor the organisation's procedures for maintaining Occupational Health and Safety records for the team

LEARNING OUTCOMES

On completion of this workshop participants will be able to:

- Legislation, codes and national standards relevant to the workplace
- Occupational Health and Safety legislation dependent on State or Territory legislation and requirements
- Organisational Occupational Health and Safety policies and procedures
- And identify hazards and assess risks that may occur through workplace activities
- Organisational procedures for consultation
- The actions required to control risks
- Organisational health and safety records and what they should include

DURATION

Two days



Units of Competency:

BSBOHS407A Monitor a Safe Workplace

PERFORMANCE INDICATORS IN MAINTENANCE MANAGEMENT – MM08

OBJECTIVES

To introduce Managers, Potential Managers, Supervisors and Planners to the skills and competencies required to develop and manage performance indicators in Maintenance Management.

CONTENTS

Module One – Why the need for Performance Measures?

- Objective of performance indicators
- The challenge of performance management
- Performance management in maintenance
- Functional performance indicators

Module Two – The application of Performance Indicators in Maintenance

- Preventative maintenance
- Predictive maintenance
- Reliability centred maintenance
- Total productive maintenance

Module Three – Other applications within Maintenance

- Financial aspects
- Continuous improvement
- Inventory and procurement
- Work order systems
- Computerised maintenance management systems
- Training
- Operations

LEARNING OUTCOMES

On completion of this workshop participants will be able to:

- Describe performance indicators and how they apply to maintenance.
- Develop and implement performance indicators according to company maintenance practices.
- Develop and implement performance indicators in all associated aspects of maintenance.

DURATION

One day



Units of Competency:

BSBPM404A Apply Quality Management Techniques

MNQGEN662A Establish Operational Performance Management System

MAINTENANCE OPERATIONS PLANNING – MM07

OBJECTIVES

To enable managers and supervisors who have had some experience in maintenance to develop skills and competencies in the management and planning of maintenance operations.

CONTENTS

Module One – Selection of Maintenance Strategies

- Environmental Considerations
- Preventative Maintenance
- Planned/Corrective Maintenance
- Breakdown Maintenance
- Predictive Maintenance
- Techniques

Module Two – Costing Maintenance

- What are the costs?
- Cost optimising
- Cost effectiveness
- Capital Expenditure
- Life Cycle costing

Module Three – Managing Maintenance Projects

- A simple model
- The process

Module Four – Equipment Management

- Standardisation
- Interchange ability
- Reparability
- Serviceability

Module Five – Getting Value for Money from Maintenance

- Value analysis
- Value engineering
- Recent developments in value engineering

LEARNING OUTCOMES

On completion of this workshop participants will be able to:

- Analyse and select the best maintenance strategy for their organisation.
- Describe and apply methods for costing and controlling maintenance.
- Develop processes and procedures for managing maintenance projects.
- Develop and implement strategies for equipment management over the life of the equipment.
- Analyse maintenance practices to ensure that the best value for money is received by an organisation.

DURATION

One Day



Units of Competency:

BSBPMG401A Apply Scope Management Techniques
WA50395MM02 Maintenance Operating Environment

MICROSOFT PROJECT BASIC/INTERMEDIATE – PM20

OBJECTIVES

To provide Project Managers, Project Co-ordinators and other project staff with the skills and competencies required to develop their project plan using Microsoft Project 2007.

CONTENTS

Section One – Getting Started

- Loading Project 2007
- The Project 2007 screen
- Creating Projects
- The Microsoft Project Window
- The Screen Elements
- Short-Cut Menus
- Auto Correct

Section Two – Setting up the Project

- Project Information and environment
- The organiser and defining a calendar
- Saving workspace, Opening and closing files and Views

Section Three – Further enhancement of your project

- Formatting and Editing the Gantt Chart
- Milestones and Recurring tasks
- Task dependencies
- Setting relationship Intervals
- Working with constraints and Summary tasks
- Collapsing and expanding an outline

Section Four – Fixed Costs

- Task costs
- Assigning and viewing costs
- Comparing actual costs

Section Five – Resources

- Methods for entering resources
- Using, removing and replacing a resource
- Setting a specific start time
- Scheduling and working with resources
- Using a resource list

Section Six – Managing the Project

- Entering Actual Data, Percent Complete & Duration Information
- Tracking the Variance and Checking the Schedule
- Controlling the Slack Times, Over allocated Resources & Views

Section Seven – Tracking Progress

- Checking Progress, Tasks and Resources
- Rescheduling the Remaining Duration
- Evaluating your Progress

Section Eight – Printing and Reports

- Page set up
- Making your own data collection forms
- Reports

Section Nine – Using Filters

- Preset filters and Creating your own filters

LEARNING OUTCOMES

On completion of this workshop participants will be able to:

- Create and setup projects using MS Project 2007.
- Enter data using Gantt Charts and tables.
- Assign and schedule resources and costs.
- Print documents and reports.

DURATION

One day



Units of Competency:

MCMT260A Use Planning Software Systems in Manufacturing
MCMT460A Facilitate the Use of Planning Software Systems in Manufacturing

THE MAINTENANCE WORKING ENVIRONMENT – MM02

OBJECTIVES

To introduce Managers, Potential Managers, Supervisors and Planners to the skills and competencies required to plan and layout maintenance facilities in their organisations.

CONTENTS

Module One – Plant/Workshop Layout

- Design objectives and steps
- Layout and design
- Layout and value Engineering
- Plant layout
- Product and process layouts
- Factors affecting flow of materials
- Ergonomics

Module Two – Selection and use of Materials Handling Equipment

- Principles of materials handling
- Equipment types and their uses

Module Three – Layout Planning

- Phases of layout planning
- Layout specifications and requirements

LEARNING OUTCOMES

On completion of this workshop participants will be able to:

- Describe the objectives and steps associated with Plant/Workshop layout.
- Identify and describe the factors affecting the flow of materials.
- List and apply the principles of materials handling to their work environment.
- Layout a workshop using a systematic approach.
- Describe and apply the process and procedures for acquiring new/replacement plant and equipment.

DURATION

One day



Units of Competency:

WA50395MM02 Maintenance Operating Environment

ROOT CAUSE ANALYSIS – MM03

OBJECTIVES

To develop the skills and competencies required to apply Root Cause Analysis as a team member of an analysis and implementation group. It enables the participant to effectively assist a team to discover and address the underlying causes of loss as it applies to high capital value operations or facilities.

CONTENTS

Module One – Understanding and Applying Root Cause Analysis (RCA)

- What is Root Cause Analysis
- When to use RCA
- The principles of RCA
- The benefits of RCA

Module Two – Defining the Problem

- Elements of problem definition
- Sources of information
- Accuracy and reliability of information
- Ongoing measurement of the problem
- Defining the Target State
- Comparing and ranking projects

Module Three – Identifying Root Causes

- Methods of identify root causes
- Group facilitation techniques
- Use of supporting evidence
- Missing and conflicting evidence
- Non contributory factors
- Identifying probable causes
- Documenting the analysis

Module Four – Planning and Implementing Solutions

- Developing and testing possible solutions
- When to use Root Cause Analysis
- Planning and costing solutions
- Return on investment and application for funds
- Managing the implementation
- Measuring success and documenting outcomes

LEARNING OUTCOMES

On completion of this module, participants will be able to:

- Understand Root Cause Analysis and identify potential applications.
- Define, monitor and rank problems according to risk.
- Assist a team to conduct an investigation for possible causes.
- Develop, cost, implement and document a solution to the problem.

DURATION

One day



Units of Competency:

MCMT280A Undertake Root Cause Analysis

PROJECT HUMAN RESOURCES MANAGEMENT – PM06

OBJECTIVES

To provide Project Managers, Project Co-ordinators and other project staff with the skills required to employ, retain and motivate staff.

CONTENTS

Module One – Introduction to Human Resources

- What is Human Resource Management?

Module Two – Planning

- Objectives of Human Resources
- What is Human Resources and its Purpose
- Integration of Human Resource Planning and Functions
- Legislation Affective HR in Australia

Module Three – Positive Description and Job Description

- Objectives of Job Design
- Work Redesign and Motivation
- Job Descriptions and Job Analysis

Module Four – Recruiting and the Selection Interview

- Recruitment as a Process
- Job Descriptions
- The Cost of Human Resources
- The Vacancy Algorithm
- Selection Checklist
- Equal Opportunities Act 1984
- Some Considerations for Bias Free Selection Procedures
- Selection Criteria – Method and Interview
- Reference Checking/Referees Reports

Module Five – Training

- Systems Approach to Training
- Bloom's Taxonomy
- Learning Styles – General Descriptions
- Training Needs Analysis
- When to Train?
- Competency-based Training and Outcomes
- Evaluation

Module Six – Occupational Health and Safety

- Occupational Health and Safety Legislation
- Worker's Compensation

Module Seven – HR Information Systems

- Defining HRIS and why it's needed
- Historical Eras in HR
- System Outputs
- HRIS Modules
- The Future of HRIS
- Problems with HRIS
- Successfully Introducing HRIS

LEARNING OUTCOMES

On completion of this workshop participants will be able to:

- Discuss the requirements for recruitment and selection of staff
- Undertake job analysis
- Develop and assess training programs
- Develop solutions to resolve HR management problems
- Discuss Health and Safety legislation in regard to employees

DURATION

One day



Units of Competency:

BSBPMG506A Manage Project Human Resources

MANAGING THE MAINTENANCE INVENTORY – MM05

OBJECTIVES

To develop the skills and competencies required to plan and manage maintenance inventories in organisations.

CONTENTS

Module One – Management of Maintenance stores

- What are maintenance stores?
- Management of maintenance stores
- Improving service levels from your store
- Monitoring performance

Module Two – Stores Operations

- Layout and care of stock in the stores
- Stores location
- Bar-coding

Module Three – Stock control and purchasing

- Introduction to stock control methods
- The purchasing cycle

LEARNING OUTCOMES

On completion of this workshop participants will be able to:

- Describe what makes up a maintenance inventory
- Identify methods for improving the management of Maintenance stores
- Describe and apply skills and techniques that will improve the operations of the maintenance store
- Identify methods for purchasing and issuing stores
- Apply stock control methods
- Describe and apply the purchasing cycle

DURATION

One day



Units of Competency:

FNACCT406B Maintain Asset and Inventory Records

RELIABILITY CENTRED MAINTENANCE – MM09

OBJECTIVES

To introduce Managers, Potential Managers, Supervisors and Planners to the skills and competencies required to develop and implement reliability centred maintenance within their organisations.

CONTENTS

Module One – Introduction to Reliability Centred Maintenance

- RCM a brief history
- The why and what of RCM
- RCM and its application
- The RCM Model
- The process and strategies of implementing RCM

Module Two – The RCM Process

- The role of the plant or asset register
- Examining functions and failures
- Determining the consequences of failure

Module Three – Preventative Applications and Actions

- Can it be done?
- Time related failures
- Frequency of scheduled restoration tasks?
- The technical feasibility of scheduled maintenance
- The effectiveness of scheduled restoration tasks
- Scheduled discard tasks
- Selecting preventative tasks
- Scheduled and the frequency of failure-finding tasks
- A less formal approach to setting failure-finding techniques
- What if failure-finding is not suitable
- No scheduled maintenance
- Redesign
- Design and maintenance

Module Four – Applying RCM

- The RCM decision process
- Organising the tasks
- The maintenance system
- Running time planning
- Defect reporting

LEARNING OUTCOMES

On completion of this workshop participants will be able to:

- Describe RCM and how they may apply it in their organisations.
- Develop and implement RCM within their organisation.
- Describe the applications for RCM.

DURATION

One day



Units of Competency: MCMT681A Develop a Proactive Maintenance Strategy

QUALITY MANAGEMENT – PM05

OBJECTIVES

To provide Project Managers, Project Co-ordinators and other project staff with the skills and competencies required to manage quality in their projects.

CONTENTS

Module One – Quality Management in Projects

- Overview
- Applicable quality concepts
- Quality aims and definitions
- Total Quality Management
- Quality Tools and Techniques

Module Two – Applying Quality in the Project Phases

- Quality Management in the Project Lifecycle
- Set Up Phase
- Planning Phase
- Implementation Phase
- Completion and Evaluation Phases
- Quality Plan

Module Three – Quality Assurance in Projects

- The Origins
- Quality Assurance Definitions
- Obtaining Certification
- Accredited Third Party Certification Organisations

LEARNING OUTCOMES

On completion of this workshop participants will be able to:

- Describe and apply quality requirements to project plans and processes.
- Identify those people involved in the quality process.
- Identify and apply quality objectives, standards and levels to ensure project quality outcomes are achieved.
- Develop and implement a project quality plan.

DURATION

One day



Units of Competency:

BSBPMG505A Manage Project Quality