

Technical Training Programmes

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1. Introduction

The Drivers for Learning and Development in Contemporary Business

Today's managers and professional staff must be competent to cope with greater levels of uncertainty and complexity than ever before. Implementation of cutting edge technology and the irresistible attractions of globalisation are driving change at unprecedented rates. Meeting the demands of stakeholders and society for regulation and transparency across multi geographical and cultural locations dramatically compound this relentless growth in complexity.

It is a well documented fact that organisations which do not keep pace with the rate of change in their business environment quickly fail. A strategic learning culture, hot linked to the business strategy, is therefore vital within our organisations.

Ensuring the Learning and Development Supports the Commercial Edge

Our fundamental approach to training is to help organisations compete in their business environment. Where we are engaged to look at the learning needs of an organisation – we do so by truly understanding what competencies are necessary to support the short and long term development of the business. To achieve this, we build self regenerating learning mechanisms which will give sustaining business advantage.

Our Ethos

We work with clients to identify the true learning needs and where interventions can ***make a difference to the business performance***. All of our training is based on fundamental principles – these are timeless, and provide the tools to make the vital judgements about the future.

We Differentiate Ourselves as Consultants who are Trainers

Our goal is to embed the basic principles and provide a practical understanding through transfer of experience, founded on our capabilities as consultants and abilities as trainers.

Thus we compliment the theoretical foundations with insights to practical experience, real life examples and case studies.

This pragmatism is reflected in our active input into the emerging standards for Governance and Business Architectures.

2. Overview of Services

2.1 What we Do

MD Consultancy provides both management consultancy and training courses for executives and managers. Our training courses take two forms:

1. Standard Training Programmes – as outlined within this document
2. Bespoke Training Programmes – where we customise the training for a specific aim group.

Our programmes may be held as public or in-house events.

2.2 The McFetridge Suite

Our training is based on two key features:

- **The McFetridge Suite** – which is a comprehensive range of management development materials currently encompassing some 1,500 PowerPoint slides
- **MD Consultancy's Experience in Strategic Management** – our programmes have a solid basis in management theory which is enriched through our practical experience as consultants.

2.3 Strategic Partners

Our programmes are offered through Strategic Partners in various parts of the world

2.4 Training Needs Analysis (TNA)

We undertake training needs analysis (TNA) – we do this in close partnership with our clients.

We see a TNA as:

- An integrated component of the overall business strategy
- Aligned with the organisations value chain(s)
- Having empathy with the culture of the organisation

The outcome is a TNA which is:

- Comprehensive – from boardroom to front line product/ service delivery
- Thoroughly planned to recognise existing knowledge and how to grow competency with the planned needs of the organisation for growth

3. Maintenance Training Courses

3.1 Development of Maintenance Documentation

| | | |
|--|---|---------------|
| <i>Title:</i> | Development of Maintenance Documentation | |
| <i>Aim Group</i> | Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders, Maintenance Planners | |
| <i>Duration</i> | 2 Day. | Open/In-house |
| <i>Lecturers</i> | | 2 |
| Programme at a Glance | | |
| <p>Many organisations are now multi-national and in many cases multi-lingual, in these circumstances it vital that the maintenance documentation is developed to a standard that is concise and can only be interpreted by users in one way. This programme will identify tools, methods and formats that will meet these requirements. Part of the programme will be practical, where the delegates will develop specimen documents using the methods discussed during the programme.</p> | | |
| Who Should Attend | | |
| <p>The following should attend this programme as they are responsible for the development of maintenance documentation to meet company policies and strategy: Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders and Maintenance Planners.</p> | | |
| Course Outline | | |
| <p>This programme will cover the following elements:</p> | | |
| <ul style="list-style-type: none">➤ Communication Methods➤ Standard Phrases and Words➤ Document Development and Information Standards, e.g. structure, codes➤ Development tools and systems➤ Document Management➤ Development of Planned Maintenance Reports➤ Development of Maintenance Reports | | |
| Learning Outcomes | | |
| <p>By the end of this programme, delegates will be able to:</p> | | |
| <ul style="list-style-type: none">➤ Understand the importance of the use of standard phrases and words➤ Develop effective Planned Maintenance Routines➤ Develop effective Maintenance Reports➤ Understand the requirements of Document and Information standards | | |

3.2 Maintenance Function Optimisation

| | | |
|------------------|---|---------------|
| <i>Title:</i> | Maintenance Function Optimisation | |
| <i>Aim Group</i> | Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders, Maintenance Planners | |
| <i>Duration</i> | 3 Day. | Open/In-house |
| <i>Lecturers</i> | | 2 |

Programme at a Glance

In to-days business where performance and efficiency is applied to all facets of a company it is vital to provide managers, team leaders etc. with the resources to meet the day-to-day challenges.

This programme will provide the delegates with concepts and methods to identify and implement optimisation recommendations to all facets e.g. organisation structure, maintenance processes, spare parts, of the maintenance function

Who Should Attend

The following should attend this programme as they are responsible for the execution of the maintenance programme to meet the company policies and strategy: Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders, Maintenance Planners. Organisation Development Managers and Team Leaders should benefit from attend this programme.

Course Outline

This programme covers the following elements:

- Role of the maintenance function vision, and goals
- Integration of the maintenance strategy with the company's business strategy and business plan
- Methods and processes used to identify and prioritize the areas of the maintenance function to be optimised e.g. spare parts, organisation structure, communication methods, manpower numbers, interfaces with other disciplines
- Methods to assess the risk of implementing the optimisation programme
- Methods and processes used to identify that the maintenance function is capable of absorbing and maintaining the identified optimisation changes
- Development of an action plan to implement optimisation to the maintenance function
- The process to track and manage the optimisation programme

Learning Outcomes

By the end of this programme, delegates will be able to:

- Develop a clear understanding of the maintenance function vision, and goals
- Understanding of how the maintenance strategy must be integrated with the company's business strategy and business plan
- Identify and prioritize the areas of the maintenance function to be optimised
- Identify if the maintenance function is capable of absorbing and maintaining the identified optimisation changes
- Understand the process of developing an action plan to identify and implement optimisation to the maintenance function
- Understand the process to track the success of the implementation of the optimisation.

3.3 Maintenance Material Management System (MMSC) Optimisation

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|------------------|---|---------------|
| <i>Title:</i> | Maintenance Material Management System Computerised (MMSC) Optimisation | |
| <i>Aim Group</i> | Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders, Maintenance Planners System Administrators | |
| <i>Duration</i> | 2 Day. | Open/In-house |
| <i>Lecturers</i> | | 1/2 |

Programme at a Glance

The question asked in many companies is what advantages have been achieved from the implementation of the MMSC. This programme will give delegates an insight to the optimisation programme, and a framework of methods to implement this of activity.

Who Should Attend

The following should attend this programme, Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders, Maintenance Planners, System Administrators, and personnel with responsibilities for the operation and administration of the MMSC. As the MMSC may have an impact on financial, material HSE and HR functions it would also be advantage for these disciplines to attend this programme

Course Outline

This programme will cover the following elements:

- Function of Maintenance Material Management System
- Integration into the Maintenance Function
- Review of specification to current use
- Data Standards
- Data Review Process
- System Security Review
- Performance Review
- Risk assessment of optimising MMSC

Learning Outcomes

By the end of this programme, delegates will be able to:

- Develop a plan for the review of MMSC
- Implement an optimisation review of MMSC
- Develop optimisation recommendations

3.4 MMSC Upgrade Specification

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|------------------|---|---------------|
| <i>Title:</i> | MMSC Upgrade Specification | |
| <i>Aim Group</i> | Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders, Maintenance Planners | |
| <i>Duration</i> | 2 Day. | Open/In-house |
| <i>Lecturers</i> | | 1 |

Programme at a Glance

The MMSC is a vital tool in the day-to-day activities of many companies and disruption to its operation can cause many problems. Upgrading the MMSC due to software updates, internal improvements, optimisation etc., it is important to plan the upgrades to ensure minimal disruption. From this programme the delegates will gain an insight to the methods, processes and activities to reduce any disruption to a minimum.

Who Should Attend

The following should attend this programme, Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders, Maintenance Planners, System Administrators, and personnel with responsibilities for the operation and administration of the MMSC.

As the MMSC may have an impact on financial, material HSE and HR functions it would also be advantage for these disciplines to attend this programme

Course Outline

This programme will cover the following elements:

- Function of Maintenance Material Management System
- Specification System changes
- Specification of company specific changes
- Specification of Data Changes
- Risk assessment of implementing changes
- Projection of improvement to be achieved from implementing the changes
- Performance Measurement plan for changes
- Implementation Plan:
 - Communication of Changes
 - User Training
 - Cost
 - Time
 - Resources
 - Disruption

Learning Outcomes

By the end of this programme, delegates will be able to:

- Identify and assess the impact of upgrades and modifications
- Develop an implementation plan to upgrade the MMSC
- Develop measurements to assess the success of the MMSC upgrade
- Support the implementation of the upgrades to the MMSC

3.5 MMSC Specification Development

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|------------------|---|---------------|
| <i>Title:</i> | MMSC Specification Development | |
| <i>Aim Group</i> | Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders, Maintenance Planners | |
| <i>Duration</i> | 1 Day. | Open/In-house |
| <i>Lecturers</i> | | 1 |

Programme at a Glance

Development of the specification for a MMSC is one of the most vital aspects to ensure that the system delivers the desired results. In spite of this being a foundational aspect, it is all too often not given this standing in the urgency to get the benefits of the MMSC in place. This programme provides a balanced view on the importance of this step and the rigour with which it should be undertaken.

Who Should Attend

The following should attend this programme, Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders, Maintenance Planners, System Administrators, and personnel with responsibilities for the operation and administration of the MMSC.

As the MMSC may have an impact on financial, material HSE and HR functions it would be advantage for these disciplines to attend this programme

Course Outline

This programme will cover the following elements:

- Function of Maintenance Material Management System
- Needs profile for MMSC
- Maintenance function culture requirements to operate MMSC
- Plan for integration of MMSC TO Maintenance Function
- System Specification
- Data Review
- Risk assessment of implementing MMSC
- Implementation Plan:
 - Communication of Changes
 - User Training
 - Cost
 - Time
 - Resources
 - Disruption
- Projection of improvement to be achieved from implementing MMSC
- Performance Measurement plan for changes

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Learning Outcomes

By the end of this programme, delegates will be able to:

- Support the development of System Specification
- Support the development of Implementation Plan
- Support the implementation of MMSC
- Support the management of the operation of the MMSC
- Review the performance of the MMSC integration to the maintenance function

3.6 Maintenance Strategy Part 1 Introduction

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|------------------|--|---------------|
| <i>Title:</i> | Maintenance Strategy Part 1 Introduction | |
| <i>Aim Group</i> | Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders, Maintenance Planners, Operations Managers, Safety Managers, Business Planners | |
| <i>Duration</i> | 1 Day. | Open/In-house |
| <i>Lecturers</i> | | 1/2 |

Programme at a Glance

Many organisations are confident of having a maintenance strategy in place and assume that it is integrated with the overall business strategy and business plan. The pace of change in business strategies and plans make it a challenge to ensure that the maintenance strategy reflects and supports the business requirements.

As the implementation of maintenance is a large contribution to the financial outgoings of a business it is vital that the maintenance strategy is integrated with the business strategy and plans to ensure efficient implementation.

Who Should Attend

Maintenance Managers, Maintenance Engineers, Maintenance Planners, Operations Managers, Safety Managers and Business Planners should attend this programme, and, managers, team leaders, affected and required to support the execution of the maintenance strategy.

Course Outline

This programme covers the following elements:

- Definition of Maintenance Strategy
- Linking the Maintenance Strategy with the Business Strategy and Business Plan
- Framework of a Maintenance Strategy

Learning Outcomes

By the end of this programme, delegates will be able to:

- Understand the function of a Maintenance Strategy
- Understand the importance of a Maintenance Strategy to the business
- Understand how the maintenance strategy integrates with the overall business strategy and business plan

3.7 Maintenance Strategy Part 2 –Development, Implementation, Review

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|------------------|--|---------------|
| <i>Title:</i> | Maintenance Strategy Part 2 –Development, Implementation, Review | |
| <i>Aim Group</i> | Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders, Maintenance Planners, | |
| <i>Duration</i> | 2 Day. | Open/In-house |
| <i>Lecturers</i> | | 2 |

Programme at a Glance

The pace of change in business strategies and plans make it a challenge to maintenance professionals to ensure that the maintenance strategy reflects and supports the business requirements.

As the implementation of maintenance is a large contribution to the financial outgoings of a business it is vital that the maintenance strategy is dynamic and its implementation contributes to the companies efficiency.

The maintenance strategy should show how the maintenance function utilises the available resources, meets legislation and company policies, to maintain the plant to meet the necessary requirements.

Who Should Attend

Maintenance Managers, Maintenance Engineers, Maintenance and Mangers and Team Leaders, responsible or in the development, implementation and review of Maintenance Strategies.

Course Outline

This programme covers the following elements:

- Development of a framework of contents of a maintenance strategy
- Overview of the development process of a maintenance strategy
- Overview of the process to implement a maintenance strategy
- Overview of the process to review a maintenance strategy
- Integration of the maintenance strategy to the business strategy and plan
- Measurement methods to assess the success of the implemented maintenance strategy

Learning Outcomes

By the end of this programme, delegates will be able to:

- Support the development of a maintenance strategy
- Support the implementation of a maintenance strategy
- Support the review of a maintenance strategy
- Identify how to link the maintenance strategy is with the business strategy and business plan
- Identify the information that should form the maintenance strategy
- Support the development of the plan to implement the maintenance strategy
- Develop framework of contents for development of a maintenance strategy

3.8 Management of Maintenance Data and Information

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|------------------|--|---------------|
| <i>Title:</i> | Management of Maintenance Data and Information | |
| <i>Aim Group</i> | Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders, Maintenance Planners, Maintenance System Administrators | |
| <i>Duration</i> | 2 Day. | Open/In-house |
| <i>Lecturers</i> | | 1/2 |

Programme at a Glance

Maintenance Managers in today’s business environment are responsible for ensuring documentation and information relating to maintenance, required by legislation, company policy, certification bodies etc. are collected, stored and retrieved when required.

This programme will provide the maintenance managers with outline methods and processes to identify and optimise the data and information to be collected and stored.

Who Should Attend

The following should attend this programme as they are responsible for ensuring that all data and information relating to the maintenance programme is available when required. Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders, and Maintenance Planners, should attend this programme

Course Outline

This programme covers the following elements:

- Typical information and documentation collected related to the maintenance function
- The types of media used to record maintenance documentation and information
- The methods of storage and retrieval for the different types of media
- Process to identify which documentation and information is required for, every day use, regular use and legislation purposes
- Process to optimise information and documentation, collected, stored
- Risk of implementing optimisation recommendations
- Development of an action plan to implement optimisation to the maintenance function
- The process to track and manage the optimisation programme

Learning Outcomes

By the end of this programme, delegates will be able to:

- Develop a process to identify optimisation of maintenance documentation and information
- Methods to optimise maintenance documentation and information
- Identify how information and documentation should be stored and retrieved
- Develop an action plan for optimising maintenance documentation and information
- Develop a tracking process for the optimisation and management of maintenance documentation.

3.9 Performance Management Integrated in the Maintenance Function

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|--|--|---------------|
| <i>Title:</i> | Performance Management Integrated in the Maintenance Function | |
| <i>Aim Group</i> | Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders, Maintenance Planners, Performance Management Managers | |
| <i>Duration</i> | 3 Day. | Open/In-house |
| <i>Lecturers</i> | | 2 |
| <p>Programme at a Glance</p> <p>During the past few years the majority of companies have implemented some form of Performance Management either pan organisation or in vital areas of the business. This programme will provide the delegates with an insight to the principles of performance management, methods to identify Key Performance Indicators and how to measure performance in the maintenance function.</p> <p>Who Should Attend</p> <p>The following should attend this programme, Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders, Maintenance Planners, Performance Management Managers, and personnel with responsibilities for the implementation and management of performance in maintenance functions.</p> <p>Course Outline</p> <p>This programme will cover the following elements:</p> <ul style="list-style-type: none"> ➤ Performance Management Philosophy ➤ Performance Management System Principles ➤ Key Performance Indicator Philosophy ➤ Identification of Key Performance Indicators ➤ Measurement Methods for Key Performance Indicators ➤ Analysis of Key Performance Indicators ➤ Implementation of Key Performance Indicator recommendations <p>Learning Outcomes</p> <p>By the end of this programme, delegates will be able to:</p> <ul style="list-style-type: none"> ➤ Understand the principles of Performance Management ➤ Understand Key Performance Indicators ➤ Identify Key Performance Indicators ➤ Identify and implement measurement methods of Key Performance Indicators ➤ Analyse Key Performance Indicators ➤ Implement continuous improvements highlighted from the Key Performance Analysis | | |

3.10 Plant Shutdown/Turnaround Maintenance Function Requirements

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|--|--|---------------|
| <i>Title:</i> | Plant Shutdown/Turnaround Maintenance Function Requirements | |
| <i>Aim Group</i> | Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders, Maintenance Planners Operations Managers Operations Team Leaders, Safety Managers, Safety Team Leaders | |
| <i>Duration</i> | 2/3 Day. | Open/In-house |
| <i>Lecturers</i> | | 2 |
| <p>Programme at a Glance</p> <p>A major activity in a Companies business plan is a plant shut down/turnaround; it is vital that this activity is implemented efficiently to ensure the plant operation disruption is minimal. To achieve this it is necessary to plan the disruption in detail, to ensure the necessary resources are available when required.</p> <p>This programme will identify process, methods and activities that will meet these requirements. Part of the programme will be practical, where the delegates will develop specifications, plans and resource requirements for exercises developed for this course.</p> <p>Who Should Attend</p> <p>The following should attend this programme, as they will be involved in all phases of a plant shutdown/turnaround maintenance activity, Maintenance Managers, Maintenance Engineers, Maintenance Team Leaders, Maintenance Planners, Operations Managers, Operations Team Leaders, HSE Managers, HSE Team Leaders.</p> <p>Course Outline</p> <p>This programme will cover the following elements:</p> <ul style="list-style-type: none"> ➤ Development of planned turnaround/shutdown maintenance process framework <ul style="list-style-type: none"> ➤ Initial Preparation Phase <ul style="list-style-type: none"> ➤ Specification of planned shutdown ➤ Development of initial work list ➤ Development of initial schedule ➤ Define time boundaries of shutdown ➤ Develop high level budget estimate ➤ Preparation Phase <ul style="list-style-type: none"> ➤ Develop turnaround shutdown work list ➤ Develop specification for work activities ➤ Develop integrated plan and initial resource requirement ➤ Development of Shutdown/turnaround procedures ➤ Preparation of reporting system and communication lines | | |

Executive Development – Training Programmes

- Develop detailed costings and budget
- Develop Organisation for turnaround Implementation
- Develop training requirements
- Document Management
- Implement plant Shutdown/Turnaround Maintenance Activity
 - Track work activities
 - Review work schedule and plan
 - Review work achieved v planned
 - Report progress
- Post Plant Shutdown/Turnaround Maintenance Activity
 - Develop report for Shutdown Turnaround Maintenance Activity

Learning Outcomes

By the end of this programme, delegates will be able to:

- Understand the process and elements required to plan implement a plant shutdown/turnaround maintenance activity
- Support the preparation and implementation of a plant shutdown/turnaround maintenance activity

3.11 Practical Introduction to Maintenance

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|------------------|---|---------------|
| <i>Title:</i> | Practical Introduction to Maintenance for: Maintenance Staff, Supervisors and Junior Managers. | |
| <i>Aim Group</i> | Maintenance Supervisors, Junior Maintenance Engineers, Junior Maintenance Planners Maintenance Technical Assistants | |
| <i>Duration</i> | 10 Day | Open/In-house |
| <i>Lecturers</i> | A Lilley & D Anderson | 1-3 |

Programme at a Glance

Maintenance is a vital requirement for companies to ensure their plant and equipment operates and the required output is obtained. However, this is achieved at a cost not a profit – and it is the staff who actually do the maintenance who have the major influence on the cost. It is often assumed that they can “put it all together” without training in the context and role of maintenance, and where priorities lie. In reality there are major gaps between this perception and what is actually happening. Simple training that explains the basics, and wins hearts and minds, can make a major impact on cost.

The objective of this programme is to help delegates give greater support to the efficient implementation of the maintenance programme.

Two lecturers will present the course. Where appropriate specialists from within the client company, or from vendors, will be invited to give presentations on specific areas of maintenance e.g. PMMS system. The programme has been designed to be practical and the delegates will be invited to complete various case studies, with syndicate exercises and individual exercises to consolidate principles.

Who Should Attend

The following should attend this programme, Maintenance Supervisors Junior Maintenance Engineers, Maintenance, Junior Maintenance Planners, Maintenance Technical Assistants, and graduate engineers undertaking industrial training.

Course Outline

This programme will cover the following elements:

- Overview of Maintenance Strategy
- Maintenance Organisation
 - Organisation Structure
 - Organisation Function

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- Maintenance Management System
 - Function
 - Functions
- Types of Maintenance
 - Planned
 - Breakdown
 - Overhauls/Repairs
- Maintenance Documentation
 - Identification of document types e.g. drawings
 - Maintenance Documentation Management
- Planning
 - Dynamic
 - Static
- Materials
 - Materials – maintenance requirements
 - Materials review
- Maintenance Execution
 - Permit to Work
 - Tool Box Talks
 - Job Planning
 - Resources
 - Quality of completed work
 - Job Reporting
- Maintenance Function Performance
 - Performance Measurements
 - Performance Indicators
 - Maintenance Performance Review
- Continuous improvement
- Quality of Maintenance Function
- Training of Maintenance Personnel
- Maintenance Review

Learning Outcomes

By the end of this programme, delegates will have:

- An overview of the maintenance function
- An understanding of maintenance planning
- An understanding of planning individual activities
- An understanding of communications requirements between maintenance, safety and operations
- An overview of maintenance strategy
- An overview of maintenance planning
- An overview of spare parts, materials and repair requirements