Capstone Course – (30 hours)

Through the application of the key learning elements from the previous seven MMP modules participants apply the principles, latest concepts and techniques to a final project. Working in small groups or teams, participants will select a project that will audit, assess and improve their current maintenance departments or develop a new maintenance strategy in their company or resolve a significant maintenance issue within their departments. There is also the option of developing a "Greenfield" maintenance strategy and program upon approval from the instructor. The assessment of the Capstone projects is intended to gualify participants for their MMP certification and designation. Mandatory Pre-requisites: Modules 1, 2, 3, 4, 5, 6 & 7

Maintenance Management Professional (MMP) **Education and Certification Program**

Register Today!

- MMP is offered at selected colleges, technical institutes and universities across Canada in both official languages.
- See www.pemac.org to find your nearest training provider.
- Both face to face and live online formats are available.
- The courses are typically offered at a pace that enables working professionals to achieve certification in just over two years

Certification Completion Requirements

• Individuals who successfully complete all 8 Modules and are members of the Plant Engineering and Maintenance Association of Canada can apply for the "Maintenance Management Professional" (MMP) designation from PEMAC.

MMP program approved for:

- The Alberta Apprenticeship and Industry Training Department "Achievement in Business Competencies" (Blue Seal) program.
- "Continuing Education Unit Credits" for Alberta and Ontario Water/Waste Water Operators.

" Through concepts such as the 'Maintenance Maturity Grid' the MMP Program really helped me to analyse where we are as a team and where we need to go to achieve maintenance excellence. I think this is the key to being able to call myself a maintenance professional. In addition, having a clear understanding of the relationships between Maintenance, Operations, Human Resources and Finance helps our team work together with others to create a good strategy with priorities based on return on investment for the company."

Bejoy Mathew, P. Eng. MMP Manager - Facilities Maintenance Planning, Suncor Energy Inc. Fort McMurray, Alberta





" I really enjoyed the Maintenance Management Professional Program; it is a great feeling of accomplishment. Before joining, I was concerned about managing a class schedule with family and fulltime work commitments. Evening and weekend classes allowed me to balance my commitments while learning excellent management practices. The program is well designed which helped me a lot to improve my knowledge and personality. I strongly recommend this program to anyone who wants to excel and explore opportunities in the field of Maintenance Management."

Sunil Lakhanpal C.Tech. MMP Maintenance Team Lead Husky Energy Sunrise Project

For more information contact:

PEMAC

6-2400 Dundas Street West Suite 402 Mississauga, ON L5K 2R8 www.pemac.org

Phone: (905) 823-7255 Fax: (905) 823-8001 Toll Free: 1-877-523-7255

E-mail: MMPProgramManager@pemac.org

REGISTER TODAY

Testimonial

" Canada Post has hired many professionals and/or sponsored many individuals with an MMP designation over the years to assist with the modernization of postal systems. Canada Post employees with the MMP designation added significant value to projects and teams in which they were integral members. Their ability to develop effective strategies and find innovative solutions in the complex environment was greatly appreciated."

Bill Hall, MMP Retired General Manager, Engineering and Maintenance Division - Canada Post

Plant Engineering and Maintenance Association of Canada

Connect, Learn, Contribute



Our Maintenance Management Professional (MMP) program provides training and accreditation to those aspiring to, or already in, maintenance management or supervisory positions. Certified MMPs are qualified to provide cost effective management of a business's physical assets.

Graduates have the knowledge and skills to drive improvements in uptime, production capacity, equipment reliability, safety, environmental compliance, economic life of assets, return on investment and effective communication between departments.

ТНАТ WORKS

Equip your Maintenance Managers with the tools they need to succeed.

www.pemac.org

Developed and authorized by the Plant Engineering and Maintenance Association of Canada the "Maintenance Management Professional (MMP) Education and Certification Program" consists of eight modules.

Modules are structured to progressively help participants understand and embrace the various concepts necessary to be effective as a maintenance and physical asset management professional. While not mandatory, it is recommended that the modules be taken and completed in the order in which they are listed.



Toll Free: 1-877-523-7255 www.pemac.org

Module 1

An Integrated Strategy for Maintenance Management – (15 Hours)

Based on the course text, *Uptime*, Module 1 develops the framework for thinking about a strategic approach to maintenance management that is integrated with the business. Drawing on the elements presented in the "Maintenance Excellence Pyramid" of Uptime, participants in Module 1 will learn how strategy, people, basic care, materials management, performance management, work management, support systems, and tools such as RCM (Reliability Centered Maintenance) and RCFA (Root Cause Failure Analysis) can work together to build a culture of excellence.



Production and Operations Management for the Maintenance Manager – (30 hours)

This module links maintenance strategies with those of production and operations. By studying production methodologies maintenance managers will be better prepared to apply these techniques to improve the performance of their business unit and align their efforts to support the production goals of the organization. Topics covered include:

- Aligning maintenance strategy with corporate strategy
- Overview of production systems and operations scheduling
- Implementing quality control
- Lean manufacturing principles and techniques
- Continuous Improvement

Recommended Pre-requisite: Module 1

Module 3 Human Resource Management for the Maintenance Manager – (30 hours)

This module looks at how human resources practices relate to the maintenance environment. Topics covered include the role of human resources in maintenance management, meeting legal requirements, recruitment and selection, orientation training and employee development, proper application of performance appraisals, the union management interface, managing change through effective leadership and managing safety in the workplace.

- Understanding the legal aspects of human resource management
- Dealing with labour issues within the maintenance environment







module 3 cont'

- Human resource planning
- Applying recruitment and selection procedures
- Conducting performance appraisals
- Implementing performance management
- Compensation management
- Managing safety within a maintenance environment
- Recommended Pre-requisite: Module 1

Module 4

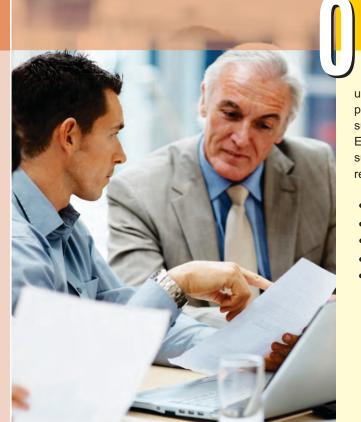
Financial Management for the Maintenance Manager – (30 hours)

This module focuses on the application of accounting and finance principles as it pertains to the maintenance management role. The module will give you an understanding of the foundation principles of accounting and cover the four main pillars of accounting knowledge the maintenance manager needs to support a successful maintenance department. These four main pillars are: Project Analysis, Budgeting/ Forecasting, Cost Analysis for Managerial Decisions, and MRO Inventory.

- Basic understanding of accounting principles
- Project analysis
- Understanding how costs flow in an Enterprise System
- Cost analysis for management decisions
- MRO inventory management
- **Recommended Pre-requisites: Module 1**







module 5 cont'

- Implementing Preventive Maintenance
- Introducing Condition Based Monitoring (CBM) into the maintenance equation

Recommended Pre-requisite: Module 1

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Maintenance Work Management – (30 Hours)

Effective work management ensures that the right things are done at the right time using the right resources and the right tools improving reliability while minimizing interruptions to production processes and/or services. This module provides a study of the fundamental principles of the work management process in addition to the basics of planning, scheduling and work coordination methods. Upon completion of this module, participants will have a sound understanding of work management tools and how to apply them to effectively transition from reactive to proactive maintenance. Key learning elements include:

- Effective use of resources
- Aligning maintenance activities with production or service schedules
- · Developing and documenting maintenance strategies
- Integrating proactive maintenance tactics **Recommended Pre-requisites: Module 1 & 5**

Module 7

Computerized Maintenance Management Systems (CMMS) - (30 hours)

Module 7 is a study of the features, benefits and the effective use of a CMMS or EAM computerized maintenance work management process. Topics include selection, implementation and optimization of a suitable Computerized Maintenance Management System (CMMS) or Enterprise Asset Management system (EAM) in addition to ongoing support and upgrading of a CMMS/EAM based on changing requirements. Topics include:

- Integrating use of CMMS with other departments
- Project planning and organization
- Implementing team development
- Assigning team roles and responsibilities
- Integrating the CMMS activities:
- Financial
- Work/Job Planning
- Data collection
- Preventive and Predictive Maintenance
- Recommended Pre-requisites: Module 1, 5 & 6

- Budgeting/Forecasting

Module 5

Developing and Implementing Maintenance Tactics – (30 hours)

This module focuses on maintenance efforts to ensure that physical assets safely, capably, reliably and repeatedly perform to their designed specifications. The focus is on techniques to develop maintenance tactics that will address how the assets are used, how they are likely to fail, the consequence of failure, and identifying maintenance tactics that are both feasible and worth doing. After developing tactics, the module will focus on how tactics need to be implemented and their effectiveness tracked. Topics include:

 Understanding the "Operating Context" Defining Asset Function and Functional Failures

- Failure Mode and Effect Analysis, FMEA
- Understanding consequences and the application of the RCM
- Decision Diagram
- Maintenance task identification
- Planning maintenance tasks

