



Maintenance Management Professional Certification Program

MMP Module 2: Production and Operations Management for the Maintenance Manager

Overview of Maintenance Management Professional Education and Certification Program

Developed and authorized by PEMAC Asset Management Association of Canada, the “Maintenance Management Professional (MMP) Certification Program” consists of eight courses which provide learners with an understanding of the various concepts necessary to be an effective maintenance and physical asset management professional. Individuals who successfully complete all eight courses are eligible to apply to PEMAC Asset Management Association of Canada, for the “Maintenance Management Professional” (MMP) certification and the right to use “MMP” designation behind their name. Renewal requirements to maintain the certification include demonstrating a minimum standard of continuing professional development (CPD), and payment of recertification fees.

The program is designed for individuals who are:

- already in maintenance management or supervisory positions and are seeking formal training.
- aspiring to management positions in the maintenance field
- seeking full maintenance accreditation through the MMP designation (Maintenance Management Professional), or
- those seeking focused training in selected areas.

Module 2 Course Description

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 organization's production goals. Topics covered include aligning maintenance strategy with corporate strategy, overview of production systems and operations scheduling, implementing quality control, lean manufacturing principles and techniques and continuous Improvement.

Learning Outcomes

Upon successful completion of this course, you will be able to:

1. Analyze the economic drivers that influence organizational strategy and demonstrate how maintenance supports cost optimization, risk mitigation, asset longevity, and organizational value creation.
(Lessons 1, 2, 3)
2. Construct a SIPOC model for an authentic maintenance process and optimize workflow clarity by accurately defining roles, dependencies, and operational handoffs involving internal teams and external service providers.
(Lessons 1, 2 • Assignment 1)
3. Justify the integration of quality and lean methodologies in maintenance operations and implement the most suitable process improvement tools to

reduce waste, stabilize performance, and strengthen process reliability.

(Lessons 4, 5, 7 • Assignment 2)

4. Engineer maintenance-enabled scheduling strategies by interpreting production system demands and coordinating maintenance plans that improve availability, control inventory investment, and sustain production capacity.

(Lessons 8, 9)

5. Defend maintenance recommendations to a supervisor by supporting decisions with operational evidence, structured evaluation, and professional communication that informs leadership action and aligns with organizational priorities.

(Assignment 3)