

Maintenance Management Professional (MMP)

About Us

Northern Lakes College is a vibrant institution offering quality and timely programming through our unique NLC LIVE Online™ delivery model. Serving over 50 communities including 15 First Nations and four Metis Settlements throughout northern Alberta, NLC distance learning technologies allow us to provide quality educational programming beyond our physical borders. NLC Continuing Education & Corporate Training delivers PEMAC's Maintenance Management Professional (MMP) Certificate and Asset Management Professional (AMP) Certificate programs to participants across Canada, North America and around the world through the online deliveries.

Since 2004, Northern Lakes College Continuing Education & Corporate Training has been a training partner with PEMAC, successfully delivering the Maintenance Management Professional (MMP) Certificate Program to participants from a wide range of industries including the utilities and energy sectors.

Imagine the possibilities of networking with maintenance and asset management professionals from across the country and around the world while learning maintenance and asset management best practices and earning your MMP or AMP designation. NLC LIVE Online™: learning from the comforts of home, the workplace, or wherever you go! Start Here. Go Anywhere.

About Maintenance Management Professional (MMP) Certificate Program

Developed and authorized by PEMAC, the MMP "Maintenance Management Professional Certificate 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 and are members of PEMAC will receive the "Maintenance Management Professional" (MMP) designation from PEMAC.

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.

Features and Benefits:

- One Language
- One Team
- Best Practices
- Creates ROI
- Standardizes Maintenance Management
- Delivered NLC LIVE Online™, be anywhere and still connect to your weekly class

Improve the performance of your organization through learning that is:**Accessible and Applied**

- Accessible to mid-career professionals
- Instructors are typically practicing professionals
- Opportunities to apply the learning to the participants' workplace context are included in projects and assignments
- Opportunities to meet and share learning with peers from a variety of regions (online), backgrounds and industries
- Each program culminates in a final project where the participants apply key concepts from each of the courses

Independent

- Designed and maintained by PEMAC member subject matter experts
- Independent from consulting services and product sales

Aligned

- With the bodies of knowledge of leading Maintenance Management and Asset Management professional associations

Recognized

- MMP courses are recognized by the [Ontario Water / Wastewater](#) Association and the [Alberta Environment and Parks](#) Water and Wastewater Operator certification for CEU credits
- MMP completion qualifies those with Journeyman Certificate, an Occupational Certificate or a recognized trade certificate for Blue Seal Certification of business competencies through [Alberta Apprenticeship and Industry Training](#) and [Saskatchewan Apprenticeship and Trade Certification Commission](#)
- Course completion qualifies for Continuing Professional Development for Engineers and Engineering Technologists. Consult your provincial engineering or CET association for more information.

NLC LIVE Online™ Delivery:

NLC LIVE Online™ delivery will require the use of our Learning Management System (LMS). NLC uses Moodle (<https://moodle.northernlakescollege.ca/>) and will provide access to the system fourteen days before the course start date. Moodle will be used for:

- Access to the online classroom (Blackboard Collaborate Ultra is launched from Moodle)
- Access to the recordings of each class (participants are to be online and participating for every class, there are requirements outlined that allow for missing classes and catching up with recordings)
- Access to the participant workbook for each module (downloadable pdf format)
- Online submission of the assignment(s) (worth 40% of the participant's final mark)
- Online access to the Final Exam (worth 60% of the participant's final mark, requires a minimum of 60% pass mark)
- Access to student email account (participants can access their email through their course in Moodle)

Participants will need:

- Laptop or desktop computer (mobile devices can be used as a back-up if required)
- Speakers and a microphone (preferably a headset)
- High-speed internet
- Google Chrome (latest version) is recommended
- To attend a 1-hour LIVE Online Orientation prior to their first course taken, and/or if they have not taken a course within 12 months and/or if technology has had a significant update that changes the online classroom/Moodle set up
 - Orientations are scheduled the week of first class for all courses and instructions are provided as to when orientation will happen

Maintenance Management Professional (MMP) Completion Requirements:

- Be online and participate for every class (attendance is taken):
 - If a participant has to miss a class they are required to inform their instructor ahead of time (or as soon as possible) and view/listen to the recording of the class missed. Once the class missed has been reviewed, participants are to inform their instructor.
 - There are limits to how many classes can be missed:
 - Module 1 – a maximum of 2 classes (2 lessons)
 - Modules 2-8 – a maximum of 4 classes (4 lessons) per module
- Submit all assignments by the due date/time per module for grading (assignments are worth 40% of the total grade, except for Module 8 Capstone Project which is 100% of the final grade):
 - MMP001: Module 1 – 1 assignment
 - MMP002: Module 2 – 3 assignments
 - MMP003: Module 3 – 4 out of the 5 assignments assigned
 - MMP004: Module 4 – 3 assignments
 - MMP005: Module 5 – 1 assignment

- MMP006: Module 6 – 1 assignment
- MMP007: Module 7 – 1 assignment
- MMP008: Module 8 – Capstone Project
- Attempt and complete the final exam by the closing date/time per module (Modules 1-7 each have a final exam) and achieve a minimum of 60% on the exam (exam is worth 60% of the total grade):
 - 1 attempt is allowed
 - 210 minutes are allotted to complete the attempt (3.5 hours)
 - Exams open after the last class (exceptions may occur for opening and closing of exam) at the scheduled end time and are open for 7 days and will close the next day at 12:00 pm NOON Mountain Time Zone. Any attempts not completed by that time will close and be submitted for grading.
- Receive a final grade of 60% or greater for each module.
- Successfully complete Modules 1-7 (or receive PLAR for modules) before taking Module 8.
- Apply to PEMAC for MMP Certificate and MMP Designation upon completion of all 8 courses.
 - For more information on applying to PEMAC for certification and/or getting PLAR (Prior Learning Assessment and Recognition), refer to PEMAC's website here:
<https://www.pemac.org/recognition/certification/mmp-certification>

The Eight Modules (Courses)

Note:

- Modules can be taken in any order except for Module 8. Participants must have successfully completed Modules 1-7 in order to take Module 8.
- Recommend that participants take one module at a time. There are four semesters that are scheduled annually with start dates in August/September, November, February, April.
 - Exceptions:
 - Module 1 is typically scheduled 5 times per year
 - Module 8 is typically scheduled 2 times per year (October/November, April)
 - **Other modules may be scheduled at different times, check our website for the most up-to-date schedule.** <https://www.northernlakescollege.ca/programs-courses/continuing-education/program/maintenance-management-professional#>
- Classes are scheduled once per week (normally) and all times listed are on Mountain Time Zone (Alberta, Canada). **Check the module for the day of the week and time scheduled for classes.**
 - Modules are normally scheduled for 3:30-6:30 pm OR 6:30-9:30 pm Mountain Time Zone
 - Some modules may be scheduled during daytime hours such as 9:00 am – 12:00 pm OR 12:00 pm – 3:00 pm.
- **Materials (textbook and workbook) are part of the registration process** and you will be given an option to get a hard-copy of the textbook plus shipping OR an e-version of the textbook if one is available for that module at the time of registration. You do not need to purchase them separately. **Access to the workbook is given in Moodle (pdf link) that you can download/print. Access is given fourteen days prior to the course start date.**

MMP001: Module 1 – An Integrated Strategy for Maintenance Management (15 hours class time)

Module 1 introduces you to an integrated and holistic approach to maintenance and asset management. It provides a perspective and structure to apply to an organization to see how the organization performance can be improved through areas of maintenance and asset management. It will introduce: the Maintenance Excellence Pyramid, how the parts of the Maintenance Excellent Pyramid are linked and a simple tool and more detailed one to evaluate and better understand an organizational position relative to the areas of the Maintenance Excellence Pyramid. **Required Text:** Campbell, J. D., & Reyes-Picknell, J. V. (2015). *Uptime: Strategies for Excellence in Maintenance Management (3rd Edition ed.)*. New York, NY: Productivity Press.

Participant Workbook: Version 11.01

MMP002: Module 2 – Production & Operations Management for the Maintenance Manager (30 hours class time)

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 and continuous improvement. **Required Text:** Stevenson, Mehran Hojati & James Cao (2015) *Operations Management (7th Canadian ed.)* McGraw-Hill Ryerson. **Participant Workbook:** Version 10.30

MMP003: Module 3 – Human Resource Management for the Maintenance Manager (30 hours class time)

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. **Required Text:** Schwind, H., Uggerslev, K., Wagar, T., Fassina, N. (2019). *Canadian Human Resource Management - A Strategic Approach (12th ed.)*. McGraw-Hill Ryerson. **Participant Workbook:** Version 10.20

MMP004: Module 4 – Financial Management for the Maintenance Manager (30 hours class time)

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 in 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. **Required Text:** McGraw Hill Custom Text – *MMP Module 4: Financial Management for the Maintenance Manager, Third Edition*. **Participant Workbook:** Version 11.10

MMP005: Module 5 – Developing and Implementing Maintenance Tactics (30 hours class time)

This module focuses on maintenance efforts to ensure that physical assets safely, capably, reliably and repeatedly perform to design 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 focuses on

how tactics need to be implemented and their effectiveness tracked. Topics include failure mode and effect analysis and root cause failure analysis in addition to the RCM decision process. **Required Text:** *Reliability-Centered Maintenance - 2nd Edition* – John Moubray. **Participant Workbook:** Version 09.02

MMP006: Module 6 – Maintenance Work Management (30 hours class time)

Maintenance Work Management forms the foundation to a maintenance department's ability to effectively add value to an organization and its customers. Effective maintenance work management ensures that the right things are done at the right time using the right resources and the right tools to assist an organization in its aims to deliver value reliably. This module provides a study of the fundamentals of the work management processes. It looks at the key steps in the process and provides a more detailed overview of the basics of planning, scheduling and work coordination methods. Upon completion of this module, participants will have a sound understanding of the maintenance work management process, the interaction between steps in the process, practices and tools available to support the process, and how to apply them to effectively transition from reactive to proactive maintenance management. Key learning elements include effective use of resources, aligning maintenance activities with production or service schedules, developing and documenting maintenance strategies and integrating proactive maintenance tactics. **Required Text:** *Maintenance Planning, Coordination & Scheduling – 2nd Edition* – Don Nyman and Joel Levitt. **Participant Workbook:** Version 11.02

MMP007: Module 7 – Maintenance Information Management (30 hours class time)

This module will demonstrate why collecting and managing maintenance information is important for realizing value from assets and aligning maintenance management with the organization's overall objectives. Participants will learn when and where maintenance information is critical within the asset's lifecycle, and particularly within the maintenance management functions. This module will discuss the processes and tools that create, collect, and manage maintenance information, and how to manage data efficiently and effectively. Upon completion of this module participants will recognize maintenance management processes and information systems that define, collect and, transform data and information to underpin decision-making foundations. **Participant Workbook:** Volume 11.00 (No textbook, reading material will be provided via links and in the participant workbook)

MMP008: Module 8 – Capstone Course (30 hours class time)

Through the application of the key learning elements from the previous seven MMP modules students apply the principles, concepts and techniques to a final project. 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. All previous modules are prerequisites for this course. The assessment of the Capstone projects is intended to qualify participants for their MMP designation. **Required Texts:** Modules 1-7 textbooks.

Participant Workbook: Version 11.02

Current Pricing is a separate attachment