



**Mechanical Contractors Association**  
WESTERN WASHINGTON



# **MCA of Western Washington Educational Programs**

## Why You Should Attend

The Certified Mechanical Project Manager training program is designed to provide mechanical project managers of all levels with intensive training in many important skill areas. The program accelerates the traditional way of acquiring knowledge on the job, where it can take years for a project manager to be exposed to all of these skills.

## **CMPM 1** *Fundamentals of Successful Project Management*

**For project managers with approximately 0-3 years\* of experience**, as well as anyone who is interested in exploring a career in project management. Also useful for staff members who directly interface with or support project managers (engineers, estimators, detailers, contract administrators, accountants), or who simply wish to have a solid overview of all aspects of the mechanical contracting business. The program focuses on the mechanics of the field, processes required, and how to manage them.

### **Benefits:**

1. *Acquire basic project management skills in much less time than it would take to learn them on the job.*
2. *Gain a solid introduction to key areas that impact profit and loss.*
3. *Set good organizational habits early on.*

\* Applications for all levels are subject to review and approval by the MCAWW Board of Education

*“CMPM 1 has been first rate and has immediate benefit to my current work.”*

*“... [CMPM 2] has challenged me to a higher level of professionalism...”*

*“By understanding the bigger picture, I can see how my decision on the project I manage can affect our company as a whole.”*



**For more information about CMPM programs,  
visit [www.mcaww.net](http://www.mcaww.net) or call (206) 442-9029**

## **CMPM 2** *Enhanced Skills for Experienced Project Managers*

**For project managers with 3-7 years\* of experience** in mechanical project management, who need to broaden their skills and acquire critical knowledge that is difficult to obtain on the job. This program provides a mixture of lecture and effective, hands-on activities to reinforce concepts learned.



### **Benefits:**

1. *Improve leadership skills and practices, applying them to become a more effective decision-maker for your firm.*
2. *Improve your ability to more accurately forecast cost to minimize drastic changes in margin at the end of the day.*
3. *Sell work and negotiate change orders without giving up company resources.*
4. *Minimize or quantify risk by understanding the legal contract terms in the subcontract.*



## **CMPM 3** *Advanced Skills for Project & Team Leaders*

**Designed for experienced managers with 7+ years\* of experience**, this program covers a multitude of topics including:

1. *Developing Yourself & Your Team for Peak Performance*
2. *The Project Manager and Foreman Relationship*
3. *Financial Management for the Senior PM*
4. *Risk Management Strategies*
5. *Conflict Resolution Skills*
6. *Strategies for Negotiating on Your Projects*
7. *The Trusted Advisor Role*

## Why You Should Attend

The programs in the MCAWW Technical Training Series are designed to provide project managers, project engineers, detailers/coordinators, estimators, etc. with a basic knowledge of technical subjects, giving them a better understanding of systems and how to ask questions of technical experts.

## Introduction to HVAC

*Intro to HVAC is an entry-level HVAC course that will introduce you to HVAC equipment and will cover areas such as equipment identification, and functions of equipment.*

**Benefits of the program include** learning about HVAC components in an environment with other “beginners”, learning how to identify HVAC equipment and the functions of the components, and getting a chance to touch “cutaways” of particular equipment.

## HVAC Engineering *for Non-Engineer Project Managers*

*In the ‘HVAC Engineering for Non-Engineer Project Managers’ program, students will learn how to select the most cost-effective equipment, evaluate loads, and suggest value engineering alternatives. The program will provide exposure to engineering calculations used in the HVAC design process and will teach students how to determine what size of duct, pipe and equipment is appropriate for project needs.*

**Students will learn how to** minimize oversizing and will be more capable of laying out systems based on Basis of Design concepts. Upon completion, students will be prepared to ask better questions, communicate with engineers during the pre-construction processes, and participate with an advantage in change order negotiations and interviews.

### Topics covered:

- Thermodynamics
- Psychrometrics
- Load Calculations
- Pipe & Pump Sizing
- Air-handling Units
- Refrigeration
- Ductwork
- Wet Equipment



## Plunging Into Plumbing

*Plunging into Plumbing is a basic program that introduces a number of topics concerning plumbing systems. Students will learn how to classify, recognize and assemble plumbing fixtures; look up information in the Uniform Plumbing Code (UPC); size pipe for Domestic Water, Waste/Vent, and Rain Water; recognize challenges associated with various types of piping systems; and maximize productivity in the installation of plumbing systems.*

### Topics covered:

- Introduction to Plumbing & the UPC
- Fixtures & Submittals
- Domestic Sizing
- Waste Sizing
- Specialty Plumbing Systems
- Blueprint Reading
- Plumbing Estimating
- Hands-on experience with cutting pipe, fixtures and soldering



## The Last 10%: Controls, Electrical, Start-up, TAB, Cx & Closeout

*The Last 10% program is designed to help mechanical contractors understand and manage the important process of closing out and turning over a project and will include an overview of the basics, as well as challenges & pitfalls.*

### Topics covered:

- Controls
- Electrical
- Start-up
- TAB
- Commissioning
- Closeout



## What is the Mechanical Service Professional (MSP) Program?

The MSP program is a flexible, multi-module program designed to meet the needs of the many different Service roles in MCAWW member firms.

## What Purpose Does the MSP Program Serve?

The MCAWW Mechanical Service Professional (MSP) program has been designed to provide local, quality training that is relevant to our marketplace. Participants have the opportunity to acquire knowledge and skills that might take years to learn on the job, in an environment where they can safely experiment and make mistakes. The program has been designed to accommodate the wide variability in job descriptions within our member firms' Service departments.

By providing best practices and generic processes that can be customized and implemented strategically within member firms, this program will ultimately benefit the industry as a whole.



## Program Topics:

- Putting Communication to Work
- Service Agreements, Maintenance Contracts and Customer Needs
- Developing Safety as a Culture
- Customer Service - The Whole Team!
- The Heart of the System - HVAC Equipment
- Plumbing & Controls Service Opportunities
- Financials for Service - *It is Different Than Construction*
- Estimating Service Projects Successfully
- Getting Things Done in a Fast - Paced Environment

## What is the Mechanical Contracting Leadership (MCL) Program?

There is no lack of leadership opportunities in the mechanical contracting industry. However, it is often misunderstood that to be a leader, one must be in charge of a team or a department. The MCL Program recognizes that leadership can happen at any level. This is why the Board is developing a multi-tiered program: Leadership for the Individual Contributor, Leadership for the Team Leader and Leadership for the Company Leader. The programs are designed to develop the leadership skills of anyone who has potential and opportunity to influence in their organization.



## What Makes the MCL Program Unique to Mechanical Contracting?

While many competencies and topics are common to other leadership programs, MCA of Western Washington's MCL program focuses on scenarios specific to what our employees encounter in our industry. Using interactive case studies, students will learn how to apply their leadership skills to embrace challenges and opportunities that are common in the industry.

## Topics in the MCL Program for the Individual Contributor:

The Foundations of Leadership
Communication & Influence
Emotional Intelligence (EQ)
Managing Yourself to Peak Performance
The Building Blocks of Relationships
Effective Teams in the Workplace
Setting Realistic Goals
Change: Live It, Love It, Lead It!
Your Role in a Mechanical Contracting Union Environment



## MCAWW is providing Training for Apprentices enrolled in the Local 32 and Local 26 JATC Apprenticeship Programs.

2nd Year Apprentices attend two programs provided by MCAWW. In “Cost of An Hour of Labor,” students learn that the cost of an hour of labor is more than their base pay. The program also reviews union benefits and the cost of benefits, payroll taxes and insurance and other costs that factor into the total cost of an hour of labor. “Financial Tools for the Trades” helps participants build a solid, personal financial foundation. Students learn how to prepare for financial emergencies, create a spending plan, and manage credit and debt.

5th Year Apprentices attend a six-module program, taught by industry experts, which provides apprentices with knowledge about the business side of the industry and fosters stronger relationships and better communication between the field and the office.



## MCAWW also offers a Foreman Training Program series designed specifically for foremen on mechanical projects.

### Foremen Level 1

Topics:

1. *Communication Skills*
2. *Basic Project Management*
3. *Subcontracts*
4. *Financial Management*
5. *Scheduling*
6. *Project Turnover Meeting*
7. *Industry Topics*

### Foremen Level 2

Topics:

1. *Leadership & Supervisory Skills*
2. *Forecasting*
3. *Project Interviews*
4. *Understanding Scope*
5. *Project Closeout*
6. *Safety*
7. *Industry Challenges*

MCAWW periodically offers seminars and workshops on a wide variety of industry-related topics.

**Sample of recent, specialized seminar topics:**

<p><b>Technical Workshops</b></p> <ul style="list-style-type: none"> <li>• <i>Introduction to Hydronic Piping &amp; Steam</i></li> <li>• <i>Lean Construction</i></li> <li>• <i>Controls 101</i></li> <li>• <i>Innovations in Piping</i></li> <li>• <i>Performing a Commercial Water Audit</i></li> </ul>	<p><b>Service Seminars</b></p> <ul style="list-style-type: none"> <li>• <i>Making Your Service Business More Predictable</i></li> <li>• <i>Increasing Your Maintenance Base to Grow Your Profits</i></li> <li>• <i>Positive Customer Interactions</i></li> </ul>
<p><b>Other Topics</b></p> <ul style="list-style-type: none"> <li>• <i>CPR/First-Aid Certification</i></li> <li>• <i>Business Writing</i></li> <li>• <i>Labor Relations</i></li> <li>• <i>Proposal Writing</i></li> <li>• <i>MCCM</i></li> <li>• <i>Forecasting Project Labor Costs</i></li> </ul>	<p><b>MCAWW Conference</b></p> <p><i>Occurring every other year, the MCAWW Conference is a full-day event that includes motivating, educational keynote and breakout sessions, networking opportunities, and an exhibition hall featuring cutting-edge products and solutions.</i></p>



**Offered yearly - one of our most popular workshops!**

The 2-day Fierce Conversations training program is comprised of the foundation and four modules:



**The Foundation** | Set the stage for change.

**Team Conversations** | Create internal think tanks; promote cross-boundary collaboration.

**Coaching Conversations** | Improve decision-making ability and foster self-discovery.

**Delegation Conversations** | Deepen accountability and uncover clear paths for growth.

**Confrontation Conversations** | Strengthen relationships while tackling tough issues.



## **MCAWW Instructors**

MCAWW instructors are one of the keys to the success of our educational programs. The instructor pool, comprised of industry subject matter experts as well as national facilitators, has over 50 members.

MCAWW offers Instructor Training & Development (ITD) classes to our instructors to improve and hone their facilitation techniques.

MCAWW also hosts an Annual Instructor Recognition Breakfast where instructors are recognized for their contributions and the coveted 'Instructor of the Year' award is presented.



### **MCAWW Instructor of the Year Award Recipients:**

- 2018: Troy Aichele, *Holmberg Mechanical*
- 2017: Rory Olson, *MacDonald-Miller*
- 2016: Leah Gutmann, *First Forward Consulting*
- 2015: Gary Polain, *OZmosis Leadership*
- 2014: B. Joel Smith, P.E., *PSF Mechanical*
- 2013: Maria Boyer, *MacDonald-Miller*
- 2012: Troy Aichele, *Holmberg Mechanical*
- 2011: Ken Dyckman, P.E., *Hermanson Company*
- 2010: Troy Aichele, *Holmberg Mechanical*

## MCAWW Training Center

The MCAWW training center is a 1364 square foot state-of-the-art training space featuring moveable tables and chairs that can be configured to seat up to 30 people. The room also includes two wall-to-wall white boards, built-in projector and sound, an iPod docking station, polling devices for classroom engagement and many other features.



*MCAWW educational programs are open to Western Washington Mechanical Contracting Industry Improvement Fund contributors.*

**MCAWW Board of Education**

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Ty Baldi, *Ferguson Enterprises*

Leah Gutmann, *First Forward Consulting*

**MCAWW Board of Education Mission:**

**Providing MCAWW Members innovative,  
meaningful learning opportunities.**

**Knowledge ~ Growth ~ Respect**



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