

Top 10 Resources for the Classroom

The majority of the following items can be found in the [MCAA Resource Center](#).

Chartered student chapters have access to the full library by simply setting up an MCAA login that utilizes an email corresponding to the university domain.

Login and start browsing to learn something new about the mechanical contracting industry today!



1

What is Mechanical Contracting Video

Five-minute video overview of the systems, projects / industries, available career paths, and positive outlook for the wide world of mechanical contracting.

2

101 Trainings

**HVACR 101 or
Search Keyword “HVACR 101”**

10 Webbook Modules:

- What is HVACR
- Terminology and Slang Used
- Air Conditioning Basics – Small Tonnage
- Air Conditioning Basics – Large Tonnage
- Airflow Types and Systems
- Commercial System Applications
- HVACR Support Components & Controls
- Heating Systems
- Focusing on the Customer

**Plumbing Service 101 or
Search Keyword “Plumbing 101”**

5 Webbook Modules:

- Plumbing Service Business Basics
- Markets for Plumbing Services
- Finding & Developing Great Plumbing Techs
- Financial Tools and Profitability
- Operations

3

Flowcharts

Successful Project Management

Flowchart/Search Keyword “Flowchart”

Visually charts path from project acquisition, pre-construction phase, construction phase, to post job review.

Successful VDC Management

Flowchart/Search Keyword “Flowchart”

Visually charts path from project acquisition, pre-construction, planning/coordination, drawing productions, pre-fabrication & installation, to post job review.

6

WebLEM

The next generation WebLEM brings new benefits to the industry's most reliable, authoritative resource for comprehensive labor units for typical project tasks.

WebLEM Brochure

Addresses what labor units are covered, what estimating methods are available, plus additional information included such as basic assumptions and correction factors.

Faculty Token Instructions

For Faculty Advisors (do this prior to students logging in)

Login Instructions

Student Users

24-25 Competition Skills Video

Takeoff Basics (WebLEM and Trimble basics)

4

Safety & Health Resources

700+ videos, guides, manuals, quizzes, recorded webinars, model safety programs, and toolbox talks.

Worker Safety Training Videos

- > New Worker Safety Orientation
- > Fall Prevention and Protection
- > Health Hazards in Mechanical Construction
- > Electrical Safety for the Mechanical Construction and Service Industry

Supervisor Safety Training Videos

- > Pre-Task Safety & Health Planning for Supervisors

Mental Health Awareness & Suicide Prevention Resources

- > Mental Health Awareness & Suicide Prevention

5

Management Methods Bulletins

Detailed and curated deep dives into a variety of topics related to mechanical:

- Accounting/Finance (6)
- Business Transition (1)
- Change Orders (6)
- Contracts (8)
- Corporate Planning (8)
- Education & Trainings (2)
- Estimating (2)
- Fabrication (1)
- Human Resources (8)
- Insurance/Bonding (7)
- Job Management (17)
- Joint Ventures (1)
- Labor Relations (3)
- Legal (10)
- Management Innovation (7)
- Marketing (5)
- Overtime (2)
- Productivity (7)
- Purchasing (5)
- Safety (4)
- Subcontracts (3)
- Taxes (4)
- Technology (7)
- Tools & Equipment (3)

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Change Orders, Productivity, Overtime – A Primer for the Construction Industry

Planning tool to help determine the costs associated with unplanned events, circumstances and factors that may impact the outcome, productivity and schedule of construction projects. A chapter exploring the factors that contribute to BIM cost and time overruns is also included.

8

Tool & Equipment Rental Guide

Robust guide to equipment recovery costs for mechanical, electrical, line and other construction contractors. The guide offers insights on contractor-owned equipment to ensure industry professionals have the most updated costs to inform internal estimating, project proposals for new and potential customers, and cost accounting efforts. Joint project for MCAA, NECA and SMACNA.

Attendance Scholarship Conferences:

1. MEP Innovation Conference

MEP, NECA and SMACNA have partnered together to host the MEP Innovation Conference. Known as the best technology conference for mechanical, electrical, plumbing, service and sheet metal contractors, this conference provides educational sessions led by contractors from all three trade associations. This three-day event in early winter includes innovative presentations, collaborative roundtable discussions, and hands-on exhibitor demonstrations highlighting the recent technologies that can improve MEP contractors' productivity and profitability.

2. Safety & Health Conference

This conference in early winter brings together safety professionals from across the construction industry to collaborate and explore the challenges and opportunities within our field. Attendees will have the opportunity to engage in a range of educational programs designed to enhance their professional skills. Subject matter experts will cover various aspects of jobsite safety, including discussions on emerging technologies and evolving best practices that can be implemented in their operations. Hands-on workshops will also be available, allowing experts to delve into new safety & health concepts in detail and provide practical guidance to help attendees better understand these innovative ideas.

3. Women in the Mechanical Industry (WiMI) Conference

Annual summer conference featuring exceptional speakers, interactive educational sessions, industry related roundtables and opportunities to build lasting relationships with fellow women in the mechanical industry. A full menu of educational offerings will help you discover all the opportunities this industry has to offer. From industry newcomers to executives, and everyone in between, this is the event to attend for all women in the mechanical contracting industry.

4. Fabrication Conference

Fall conference focused on off-site manufacturing techniques, processes and strategies. Each year the conference includes an operations tour with a full explanation of how the host contractor performs fabrication. This is paired with practical education sessions that feature contractors showing best in class case studies of their own operations from around the country.

5. Mechanical Service Contractors of America (MSCA) Conference

Service based conference each fall that is geared specifically for the critical topics and unique challenges faced by service contractors. Explore a variety of education sessions, social events, and an interactive product exhibit while building peer-to-peer relationships and discussing best practices throughout the week.

9

Manufacturer/Supplier Training

A collection of various training videos offered by MCAA's Manufacturer/Supplier partners.

Also check out these additional Manufacturer/Supplier resources:

- **Virtual Trade Show** – Highlights links to new products, service or solutions
- **Buyer's Guide** – detailed descriptions and contacts for M/SC Members
- **Smart Solutions** – Case studies helping contractors save money and enhance productivity

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The Best Classroom Education – Get Out of the Classroom!

Take advantage of the following MCAA Conferences, complimentary for chartered MCAA Student Chapters.

MCAA Annual Convention

The MCAA Annual Convention is the highlight of the association's year. With a reputation as the industry's premier educational event, the MCAA Convention, held annually each spring, offers something for all members. Attendees will experience a first-class trade show featuring the members of MCAA's Manufacturer/Supplier Council, Student Chapter Job Fair, social functions that never cease to amaze and delight, exceptional education seminars and the chance to network and connect with industry peers.

MCAA GreatFutures Forum

Fall conference connecting students from nearly 50 student chapters with MCAA member companies. The conference offers student-focused education sessions that highlight the mechanical contracting industry, fun peer-to-peer relationship building and most importantly, a chance to network during the Friday morning job fair.

+5 additional conferences that require an Attendance Scholarship. Find your passion in mechanical! Apply for complimentary registration for up to two students and one faculty per conference.