



# Hydronics

## Saskatoon

Date: June 1<sup>st</sup> & 2<sup>nd</sup> 2022  
Time: 8:30 a.m. - 4:30 p.m.

Registration closes May 20<sup>th</sup>, 2022

Member Fee	\$1,000 + gst
Non-Member Fee	\$1,200 + gst

Venue:  
SaskEnergy / MCAS Training Centre  
1301 Quebec Avenue  
Saskatoon, SK

Lunch Provided

### CONTACT

Roma Green  
MCAS Member Services Coordinator  
Unit 2 - 2412 Faithfull Avenue  
Saskatoon, SK S7K 4A6  
T. 306-664-2154  
E. [memberservices@mca-sask.com](mailto:memberservices@mca-sask.com)

## COURSE DESCRIPTION

**Day 1**—Students learn advantages of hydronic systems, boilers, venting and combustion, air pumps, air control, expansion tanks, valves, emitters, controls, and balancing. A working hydronics board and computer software will be used to visually demonstrate many of the principles presented. Attendees will leave with a good understanding of how all the pieces in hydronics systems function and interact. They will be able to lay out the components in the correct order for proper operation and diagnose problems in existing systems.

**Day 2**—Students focus on Hydronic System Design – defining requirements, piping layout, selecting equipment, pipe/pump sizing, operating temperatures, control strategies. The group will design a system from scratch and receive Excel spreadsheet programs to do routine calculations for hydronic system design/analysis. The instruction also covers:

- Primary-secondary piping, pumping and control – including how to analyze temperature relationships.
- Boiler controls – including code requirements for safety.
- Variable-speed pumping – how it works and how to control.
- Hydronic troubleshooting techniques – analyze operational problems in hydronic systems and the tools required.
- Basic electrical troubleshooting – using a multimeter and/or test light to troubleshoot low voltage control circuits.

## THE PRESENTER

Jerry Boulanger graduated from Mechanical Engineering Technology at Kelsey Institute in 1975 and was in the mechanical construction industry as an equipment supplier and manufacturer until 2013. As part of his work he developed an interest in training and has done many sessions across Canada and in the U.S. on a broad range of hydronic and HVAC topics for contractors, institutions, ASHRAE, CIPH and mechanical contractor's associations. He is now retired from business but still does training, system analysis and troubleshooting. Jerry lives in Regina and is an Honorary Life Member of MCAS.



# REGISTRATION FORM

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### SEND COMPLETED FORM TO:

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MCAS Member Services Coordinator  
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Saskatoon, SK S7K 4A6  
T. 306-664-2154  
E. [memberservices@mca-sask.com](mailto:memberservices@mca-sask.com)

### CANCELLATION POLICY:

If you are not available to attend, you may send someone else in your place. If you need to cancel, please send written notification to MCAS at **least seven business days** prior to the course start date for a full refund.

Company: \_\_\_\_\_

Contact: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

Postal Code: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_

Attendee 1 Name: \_\_\_\_\_

Email Address: \_\_\_\_\_

Attendee 2 Name: \_\_\_\_\_

Email Address: \_\_\_\_\_

Attendee 3 Name: \_\_\_\_\_

Email Address: \_\_\_\_\_

Attendee 4 Name: \_\_\_\_\_

Email Address: \_\_\_\_\_

x \$1,000 MCAS Member \_\_\_\_\_

x \$1,200 Non-Member \_\_\_\_\_

Subtotal \_\_\_\_\_

5% GST \_\_\_\_\_

TOTAL \_\_\_\_\_

Method of Payment:            Cheque            Invoice

   VISA            MasterCard

Card Number: \_\_\_\_\_

Expiry Date: \_\_\_\_\_

Cardholder Name: \_\_\_\_\_

Signature: \_\_\_\_\_