

Transformer School and Pre-conference Workshop

November 19–22, 2024



MMUA Training Center
1004 Michigan Road
Marshall, MN

Program details

Transformer School overview

Three-phase transformer connections

The three-phase course will start with the basics of transformers, including turns ratios, polarities, calculations, connections, and troubleshooting.

Participants will learn about the basic three-phase systems and the relationship of the phasor to the transformer itself.

In the hands-on portion of the course, participants will work with miniature transformers that are energized and will blow fuses, in order to experience what happens when something is wired incorrectly.

The class will continue to build on the miniature transformer banks and work on troubleshooting. Additionally, motor rotation as it relates to three-phase systems will be discussed, as well as ways to prevent voltage surge when switching a three-phase bank.

Upon completion of the three-phase transformer connections class, participants should have a good understanding of the following topics, related to transformers:

- Basic three-phase connections
- Delta connection
- Wye connection
- Open delta connection
- Three-phase troubleshooting

About the Pre-conference workshop

Basic single-phase transformer connections and theory

The pre-conference course is intended to serve as a basic or refresher course on the fundamentals and will cover topics such as safe work practices, transformer theory, basic calculations, connections, and sizing.

Note: separate registration is required for the pre-conference workshop.

What do I need to bring?

Please bring appropriate attire and materials, including:

Safety glasses, fire-resistant clothing, secondary rubber gloves, work boots, and a volt/amp meter.

Schedule

Pre-conference workshop

Tuesday, November 19

12:00-1:00 Registration

1:00-4:00 Basic single-phase connections

Wednesday, November 20

8:30-11:30 Basic single-phase connections

12:00-1:00 Lunch served at Training Center

Transformer School

Wednesday, November 20

12:00-1:00 Registration

1:00-4:00 Three-phase transformer connections

Thursday, November 21

8:30-12:00 Classroom and hands-on training

12:00-1:00 Lunch served at Training Center

1:00-4:00 Classroom and hands-on training

Friday, November 22

8:30-12:00 Classroom and hands-on training

Schedule subject to change without notice.

Registration information

Pre-conference workshop

- Member—\$145 per person
- Non-member—\$275 per person

Transformer School

- Member—\$735 per person
- Non-member—\$920 per person

Registration fee includes school tuition, materials, refreshment breaks, and a certificate of attendance.

To register, visit mmua.org/events.

Register by October 14 for best rate. The registration deadline is October 25, 2024.

Cancellations are subject to a \$50 cancellation fee if received by 5:00 pm on October 25. Refunds issued to a credit card are subject to a 3% fee.