

# Advanced Conductors



ESA offers Electricians, Electrical Apprentices, Electrical Engineers, Electrical Designers, Senior Electrical Personnel and Health & Safety Professionals a ½ day on-site training course. Ask your Client Safety Specialist for details.

An examination of the selection and installation of conductors for specific types of installations.



## Advanced Conductors

### LEARNING OBJECTIVES:

Discuss the ampacity and deration of single conductors.

Recognize the rules that apply to selection, rating and installation of conductors.

Discuss the installation of single conductors, the requirements for shielded cables above 5 kV and the requirements for conductors in cable tray.

Identify the sizing of conductors and overcurrent devices for dry type low voltage transformers.

### TOPICS:

- Ampacity of wires and cables
  - Basic amperage table



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*Training is a non-regulatory service offered by the Electrical Safety Authority (ESA). For more information visit [www.esasafe.com/about-esa/non-regulatory](http://www.esasafe.com/about-esa/non-regulatory).*

**MISSION:** Improve electrical safety for the well-being of the people of Ontario.

**VISION:** An Ontario where people can live, work and play safe from electrical harm.

FORM 1803 (02/08/21)

## TOPICS (Continued):

- Single conductor installations
  - Single conductor ampacities
- Single conductor cable installations
  - Induced voltages and currents
  - Eddy currents
  - Sheath currents
- Underground installations
  - Underground conductors
- IEEE underground duct spacing
- Shielded conductors 5 – 46 kV
- Conductors in ventilated cable tray
- Conductor size for transformers

## WHAT TO BRING:

- Ontario Electrical Safety Code (27th Edition) – You are required to bring the 2018 Ontario Electrical Safety Code book with you to the course.
- Pen, pencil, highlighter
- Calculator
- Ontario Electrical Safety Code Bulletins

## REGISTRATION FEES:

- Half-day public (Classroom) course: \$164.00 + applicable taxes, per person
- To request a quote for a private course, contact a Client Safety Specialist at [CSS.ContactUs@electricalsafety.on.ca](mailto:CSS.ContactUs@electricalsafety.on.ca)
- \$10 CSA National Code License Fee + applicable taxes, applies per person
- Training registration cancellation requests will be subject to a refund processing fee of \$28 + applicable taxes.

**PLEASE NOTE:** This course does not attempt to render engineering or other professional services. If such services are required, the assistance of an appropriate professional should be sought.

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