CUSTOMER

FUNDAMENTAL ELECTRICAL

PETERSON UNIVERSITY SESSIONS:

Course fee $1500*
Three days
24 instructional hours
8:00 a.m. - 4:00 p.m.

WHAT TO BRING TO CLASS:

- Safety Glasses
- Work Boots
- Gloves
- Multimeter
- Laptop
  - SIS2.0 if possible

This course is designed for customer technicians with a basic understanding of the fundamental theories related to heavy equipment repair.

This course is designed to help you understand foundational electrical principles. Including Ohm's law, basic circuit control devices, electronic control units, batteries, starting/charging systems, and digital multimeter usage. You will build series and parallel electrical circuits to demonstrate the principles of each circuit and become familiarized with multimeter functionality. You will learn the skills required to assemble/disassemble multiple types of harnesses and connectors, while utilizing Caterpillar SIS2.0 Electrical schematics.

COURSE OUTCOMES:

- Identify and understand the various components used in machine electrical systems
- Describe the components found in lead acid style batteries and explain the chemical cycles that occur during operation
- Assemble and troubleshoot simple circuits on an electronic training board
- Assemble and disassemble the common electrical connector types used on Caterpillar product
- Learn how to navigate and search for relevant information in systems operation and troubleshooting guides, while using updated SIS2.0 and SIS2Go platforms
- Understand the functions and how to properly use your multimeter to troubleshoot basic electrical circuits
- Understand how to effectively download, navigate, and read electrical schematics
- Be familiar with common electrical safety practices found in a shop environment

Contact us or visit **petersonholding.com/university/classes** to learn more.

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**Course fee as of January 1, 2025 and is subject to change at anytime without further notice.*