

 Ring Power[®]

Customer Technician Training

Electrical Fundamentals

Course Name	Electrical Fundamentals
Course Number	41840
Duration	32 Hours (4 eight-hour days)
Course Description	This course provides an overview of electrical theory and application.
Skills/Topics	Objectives - Learners will be able to: <ul style="list-style-type: none">• Demonstrate an understanding of electrical theory by selecting the correct responses to basic questions on a multiple-choice quiz.• Demonstrate an understanding of magnetism by selecting the correct responses on a multiple question test.• Explain the relationship between electrical voltage, current, resistance, and power using Ohm's law. Calculate and solve unknown values for basic series, parallel, and series-parallel circuits.• Perform electrical measurements using a digital multi-meter and solve basic electrical faults with electrical training aids.• Identify and use the appropriate tools and materials to make proper repairs to wires and connectors. This will include Cat connectors and soldering.• Demonstrate an understanding of electrical circuit symbols by matching the name of the symbol with the symbol graphic.• Demonstrate the ability to read and interpret schematic information such as identifying electrical components, their locations, and part numbers.
Prerequisites	<ul style="list-style-type: none">• Introduction to Cat[®] Electronic Technician (Cat[®] ET)
Necessary Supplies and Equipment	<ul style="list-style-type: none">• Laptop with Cat[®] ET software• Safety glasses with side shields, safety shoes (or hard-toed)• Appropriate work clothing is required.

Ring Power offers customer training courses for Operators and Technicians of every skill level. Custom classes can be developed, and we offer subscriptions to Caterpillar University.

Contact our Customer Training Department to learn more at CustTraining@RingPower.com, 904-737-7730, or visit <https://www.ringpower.com/services/customer-training/>.