

# APR 101 : ELEC/MFG PLANT 1 - BASIC ELECTRIC THEORY

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## Transcript title

MPE 1 - Basic Electric Theory

## Credits

4

## Grade mode

Standard letter grades

## Contact hours total

84

## Other hours

84

## Description

Students will be introduced to content in trade math, fundamental concepts of electricity, resistance, Ohm's law, series circuits, parallel circuits, grounding, grounding electrode systems, and the National Electrical Code. This course will be taught in a lecture/lab format with hands-on use of meters, power supplies, relays and switches.

## Learning outcomes

1. Student will solve mathematical formulas and equations related to theory and practices of the trade.
2. Student will describe and apply basic theory of electrical sources in DC series and parallel circuits.
3. Student will use a volt-ohmmeter and other test equipment to make electrical measurements.
4. Student will interpret the National Electrical Code requirements as they apply to the subject matter of the course.