

# AD12-104 : Automotive Physical Science Principles: Electrical Fundamentals

Upon completion of this course, students will have learned to diagnose and service electrical circuits, batteries and starting/charging systems through physical science education using quantitative principles in electricity. Topics rooted in natural and physical sciences include but are not limited to Ohm's law, Watt's law, operations and properties of electrical circuits and components, magnetism/electromagnetism, and battery chemistry.

**Lab** 39.34

**Lec** 36.66

**Ext** 0.00

**Sem** 3.50

**TWC Sem** 3.00

**Total** 76.00

## **Catalog**

UTI Tech II

## **Recommended**

AD12-101, AD12-102\*, AD12-103 (\* for Non-EV Programs)

## **Equipment**

Digital multimeters, charging and starting system testers, and electrical system simulators

## **Campus**

Avondale, AZ

Rancho Cucamonga, CA

Sacramento, CA

Austin, TX

Bloomfield, NJ

Dallas, TX

Long Beach, CA

Miramar, FL

Orlando, FL