



Electrical Safety for Electric Vehicle (EV) Task Qualified Personnel

8-Hour Course*

OVERVIEW

This class is designed for non-electrical personnel who assemble, maintain and repair electric vehicles (EV). Mechanics, maintenance, and production personnel working on EVs must be trained to identify any electrical hazards which they may encounter as well as, determine the electrical work practices necessary to perform the work safely.

Electricity is an integral part of today's world, but it has the potential to cause severe damage. The EV industry is expanding at a rapid pace; innovations in design and engineering are diverse and continuing to evolve.

Attendees will learn key protection strategies to prevent and minimize electrical hazards and the injuries they can cause. They will also gain an understanding of tasks that are beyond their scope and require an electrically qualified person.

REFERENCES

Current NFPA 70E Standard, OSHA Regulations (as applicable)

MATERIALS

e-Hazard Student Workbook

1. Introduction

- Electrical Safety Facts
- Applicable Regulations & Standards: NFPA 70E/NEC/OSHA
- Key Terms

2. Understanding Electrical Hazards and Consequences

- Thermal Runaway Hazard
- AC and DC Shock Hazards
- Arc Flash Hazards
- When and Where Hazards Exist

Protection Strategies

3. PPE for Shock and Arc Flash

- Selection and Guidance
- Inspection/Testing

4. Job Safety Planning

5. Safety-Related Electrical Work Practices

- Tools
- Test Instruments
- Electrically Safe Work Condition Steps for EVs
- Additional EV Equipment
- Emergency Response
- Training Requirements
- Observations/Audits

*** This course includes 4-hours of classroom instruction and 4-hours of Hands on Demonstration Skills Training based on the facility-provided equipment.**