

€ TRAINING

Advanced Electrical Maintenance





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Introduction:

This training program offers participants an in-depth exploration of advanced methodologies in electrical system diagnostics and repairs. By mastering advanced isolation techniques and repair strategies, participants will enhance their ability to maintain and optimize electrical systems.

Program Objectives:

At the end of this program, participants will be able to:

- Perform advanced electrical troubleshooting procedures.
- Implement sophisticated repair techniques for electrical systems.
- Utilize advanced isolation methods to identify and address electrical faults.
- Enhance safety protocols during electrical repairs and isolations.
- Optimize electrical system performance through effective troubleshooting and repairs.

Targeted Audience:

- Electrical Engineers.
- Maintenance Technicians.
- Facility Managers.
- Electrical Contractors.
- Safety Officers.
- Industrial Electricians.

Program Outline:

Unit 1:

Advanced Electrical Troubleshooting Techniques:

- Advanced principles of electrical troubleshooting.
- Utilizing diagnostic tools and equipment effectively.

- Analyzing complex electrical circuits and systems.
- Developing systematic troubleshooting approaches.
- Case studies on advanced troubleshooting scenarios.

Unit 2:

Advanced Repair Strategies for Electrical Systems:

- Understanding advanced repair techniques for electrical components.
- Repairing steps for damaged wiring, connectors, and components.
- Replacing faulty electrical components with precision.
- Ensuring compliance with safety standards during repairs.

Unit 3:

Advanced Isolation Methods for Electrical Faults:

- Techniques for isolating electrical faults safely and efficiently.
- Steps for implementing lockout/tagout procedures for isolation.
- Utilizing isolation devices and barriers effectively.
- Performing voltage and continuity tests during isolation.
- Real-world examples demonstrating advanced isolation methods.

Unit 4:

Safety Protocols for Electrical Repairs and Isolations:

- Importance of safety protocols in electrical repairs and isolations.
- Identifying electrical hazards and implementing preventive measures.
- Personal protective equipment PPE requirements for electrical work.
- Emergency response procedures for electrical incidents.
- Safety practices during electrical work.

Unit 5:

Optimization of Electrical System Performance:

- Strategies for optimizing electrical system performance.
- Conducting preventive maintenance to avoid future issues.
- Steps for implementing, monitoring and diagnostic tools for ongoing performance assessment.
- Identifying opportunities for efficiency improvements in electrical systems.
- Case studies highlighting successful optimization initiatives.