

€ TRAINING

Electrical Installation And Maintenance





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Introduction:

The Electrical Installation and Maintenance training program focuses on equipping participants with essential skills and knowledge in electrical systems installation, maintenance, and troubleshooting. Participants will learn best practices and safety protocols necessary for ensuring efficient and reliable electrical operations in various settings.

Program Objectives:

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

- Understand the fundamentals of electrical installations.
- Gain proficiency in electrical maintenance techniques.
- Learn troubleshooting methods for electrical systems.
- Develop skills in ensuring electrical safety and compliance.
- Implement preventive maintenance strategies.

Target Audience:

- Electrical technicians and engineers.
- Maintenance personnel responsible for electrical systems.
- Facility managers and operators.
- Construction and building professionals.

Program Outline:

Unit 1:

Fundamentals of Electrical Installations:

- Basics of Electrical Theory and Principles.
- Electrical Components and Systems.
- Electrical Codes and Regulations.
- Safety Practices in Electrical Installations.

- Energy Efficiency in Electrical Systems.

Unit 2:

Electrical Maintenance Techniques:

- Preventive Maintenance Strategies.
- Routine Inspection and Testing.
- Equipment Lubrication and Cleaning.
- Electrical Troubleshooting Methods.
- Use of Diagnostic Tools and Instruments.

Unit 3:

Troubleshooting Electrical Systems:

- Common Electrical Problems and Faults.
- Root Cause Analysis RCA for Electrical Issues.
- Circuit Analysis and Testing.
- Repair and Replacement Techniques.
- Case Studies on Electrical System Failures.

Unit 4:

Electrical Safety and Compliance:

- Electrical Hazards and Safety Precautions.
- Personal Protective Equipment PPE for Electrical Work.
- Lockout-Tagout LOTO Procedures.
- Compliance with Electrical Codes and Standards.
- Emergency Response Planning for Electrical Incidents.

Unit 5:

Preventive Maintenance Strategies:



- Planning and Scheduling Preventive Maintenance.
- Implementing Predictive Maintenance Techniques.
- Asset Management and Life Cycle Planning.
- Energy Management in Electrical Systems.
- Continuous Improvement in Maintenance Practices.