Training Course on Electrical Safety in the Workplace

Professional Development Training Course Outline

Category	Engineering	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Electrical safety in the workplace is not just a compliance requirement but a critical aspect of ensuring employee protection and operational continuity. With the increasing dependence on technology and electrical equipment, understanding the hazards of electrical systems, risk mitigation, and emergency response is more essential than ever. Training Course on Electrical Safety in the Workplace equips participants with in-depth knowledge of OSHA electrical safety standards, lockout/tagout procedures, arc flash protection, and other high-risk elements, helping reduce workplace incidents and increase regulatory compliance.

This SEO-optimized course is designed for professionals and employers across industries, delivering practical guidance on electrical hazard identification, safe work practices, and emergency preparedness. Participants will gain hands-on experience, understand real-world case studies, and apply proactive electrical safety protocols in daily operations. Whether you're a safety officer, technician, or team leader, this training will empower you to foster a safer, more compliant working environment.

Programme Curriculum

Training Course on Electrical Safety in the Workplace

Introduction

Electrical safety in the workplace is not just a compliance requirement but a critical aspect of ensuring employee protection and operational continuity. With the increasing dependence on technology and electrical equipment, understanding the hazards of electrical systems, risk mitigation, and emergency response is more essential than ever. Training Course on Electrical Safety in the Workplace equips participants with in-depth knowledge of OSHA electrical safety standards, lockout/tagout procedures, arc flash protection, and other high-risk elements, helping reduce workplace incidents and increase regulatory compliance.

This course is designed for professionals and employers across industries, delivering practical guidance on electrical hazard identification, safe work practices, and emergency preparedness. Participants will gain hands-on experience, understand real-world case studies, and apply proactive electrical safety protocols in daily operations. Whether you're a safety officer, technician, or team leader, this training will empower you to foster a safer, more compliant working environment.

Course Objectives

1. Understand OSHA’s electrical safety regulations and workplace compliance.
2. Identify common electrical hazards and implement risk mitigation techniques.
3. Apply Lockout/Tagout (LOTO) procedures to control hazardous energy.
4. Conduct workplace electrical hazard assessments effectively.
5. Use personal protective equipment (PPE) for electrical work properly.
6. Interpret electrical safety signs and labeling systems.
7. Prevent arc flash incidents and understand NFPA 70E standards.
8. Develop electrical safety policies and procedures.
9. Train employees on electrical emergency response and reporting.
10. Inspect and maintain electrical equipment safely.
11. Analyze real-life electrical safety incident case studies.
12. Promote a culture of proactive electrical safety awareness.
13. Integrate electrical safety into facility management systems.

Target Audience

1. Safety Officers
2. Maintenance Technicians
3. Electricians
4. Facility Managers
5. Plant Supervisors
6. Construction Workers
7. Manufacturing Engineers
8. EHS (Environment, Health & Safety) Professionals

Course Duration: 5 days

Course Modules

Module 1: Fundamentals of Electrical Safety

- Introduction to electrical hazards in the workplace
- Overview of OSHA and NFPA 70E requirements
- Key electrical terms and concepts
- Difference between low, medium, and high voltage risks
- Role of safety audits in electrical risk prevention
- **Case Study:** Fatal electrocution during routine maintenance

Module 2: Electrical Hazard Identification and Risk Assessment

- Types of electrical hazards (shock, arc flash, fire, etc.)
- Recognizing unsafe conditions and acts
- Using hazard analysis tools (JSA, Risk Matrix)
- Job-site electrical risk assessment
- Implementing control measures
- **Case Study:** Electrical burns due to failure in hazard assessment

Module 3: Lockout/Tagout (LOTO) Procedures

- Importance of LOTO in electrical safety
- Step-by-step implementation of LOTO
- Employee responsibilities and authorized personnel
- Group lockout scenarios
- Periodic inspection and documentation requirements
- **Case Study:** Injuries from improper tagout during machine servicing

Module 4: Arc Flash Awareness and Protection

- What is arc flash and how it occurs
- Determining arc flash boundaries
- Calculating incident energy and PPE category
- Preventive maintenance and arc flash labeling
- Implementing arc flash safety programs
- **Case Study:** Severe injuries from arc flash explosion in a panel

Module 5: Electrical Personal Protective Equipment (PPE)

- Types of electrical PPE (gloves, suits, shields, etc.)
- Selecting the right PPE based on hazard category
- Care, maintenance, and inspection of PPE
- Training workers on PPE usage
- Consequences of PPE neglect
- **Case Study:** PPE failure leading to second-degree burns

Module 6: Emergency Response and Electrical Incident Reporting

- Steps to take during an electrical emergency
- Administering first aid and CPR for electrical injuries
- Incident reporting procedures and documentation
- Communication during emergencies
- Legal and insurance implications
- **Case Study:** Delayed response to electric shock causing fatality

Module 7: Safe Electrical Equipment Operation and Maintenance

- Routine and preventive electrical maintenance procedures
- Grounding and bonding requirements
- Testing and inspection of equipment
- Replacing worn-out or damaged wiring and tools
- Creating a maintenance checklist
- **Case Study:** Fire caused by uninspected faulty transformer

Module 8: Building a Culture of Electrical Safety

- Training and awareness campaigns
- Safety meetings and toolbox talks
- Leadership’s role in electrical safety culture
- Continuous improvement strategies
- Monitoring safety performance metrics
- **Case Study:** Transformation of safety culture reducing incidents by 60%

Training Methodology

- Interactive instructor-led sessions

- Group-based problem-solving workshops
- Real-life scenario analysis and case discussions
- Hands-on demonstrations of safety equipment and LOTO kits
- Online assessments and downloadable resources
- Post-training evaluations and certification

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com