




ONE DAY OF INTENSIVE TRAINING

 DANGER	
 Arc flash and Shock Hazard  Appropriate PPE Required	
48 inch	Flash Hazard Boundary
3	cal/cm ² Flash Hazard at 18 inches
1 DF	PPE Level: 1 layer 6 oz. Nomex [®] leather gloves, faceshield
480 VAC	Shock Hazard when cover is removed
36 inch	Limited Approach
12 inch	Restricted Approach - 500V Class 00 gloves
1 inch	Prohibited Approach - 500V Class 00 gloves

ELECTRICAL SAFETY

IMPLEMENT:
NFPA 70E

INCLUDES
ARC-FLASH
CALCULATIONS

“STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE”
THIS COURSE WILL TEACH YOU HOW TO GET IN COMPLIANCE WITH OSHA’S
ELECTRICAL SAFETY-RELATED WORK PRACTICES 1910.331-1910.335

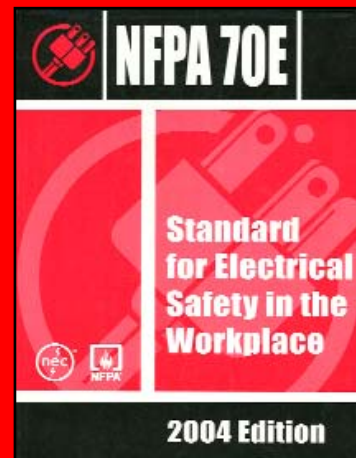
YOUR EMPLOYEES ARE REQUIRED BY LAW TO BE TRAINED

PERSONS SUCCESSFULLY COMPLETING THIS COURSE WILL BE ABLE TO:

- **WORK ON OR NEAR EXPOSED ENERGIZED PARTS**
- **DEMONSTRATE SAFE WORK PRACTICES**
- **EXPLAIN WHAT CONSTITUTES AN ELECTRICAL HAZARD**
- **EXPLAIN/RECOGNIZE APPROACH BOUNDARIES**
- **SELECT PERSONAL PROTECTIVE EQUIPMENT**
- **CALCULATE FLASH PROTECTION BOUNDARIES**

IN THE NEAR FUTURE YOU WILL BE REQUIRED BY LAW TO PERFORM FLASH PROTECTION BOUNDARY CALCULATIONS FOR ALL OF YOUR ELECTRICAL ENCLOSURES. WE WILL TEACH YOU HOW TO CALCULATE THESE; FROM 3-PHASE BUSES DOWN TO THE ENCLOSURES AND SHOW YOU HOW TO SELECT THE PROPER PROTECTIVE CLOTHING FOR ENTRY.

FREE NFPA 70E WITH YOUR
PAID REGISTRATION



**THIS CLASS CAN
BE TAUGHT AT
YOUR FACILITY**



Impact
Training Services, Inc.

Training that "WORKS"™

www.impactu.com

To Register:
800-858-6879

www.impactu.com

ELECTRICAL SAFETY

WHO WE ARE

As a company, we are dedicated to providing practical, working solutions to the problem areas of industry. We represent no manufacturers and will not subject you to any sales pitches. What we offer is quality technical training that works.

OUR INSTRUCTORS

Your instructor will be knowledgeable, enthusiastic, personable and effective. You evaluate them at the end of each class. We do not use contractors. All of our instructors are full time employees and have a vested interest in delivering a quality product. Each is well versed in the subjects they teach, has received extensive on-the-job training and follows the same course lesson plan so you receive identical information regardless of who teaches the class.

WHO SHOULD ATTEND

Supervisors, managers, maintenance personnel, engineers, operators and anyone else who needs to know about the hazards of working around electrical equipment and how to minimize the risk. There are no prerequisites for this course.

CLASS TIMES

7:30 am	Registration
8:00 am	Morning Session Begins
11:30 - 12:20 pm	Lunch (on your own)
12:30 pm	Afternoon Session Begins
4:15 pm	Post evaluation
4:30 pm	Class Ends

SUBSTITUTION OR CANCELLATION

Cancellations made SEVEN days prior to seminar date will receive a full refund. Substitutions can be made at any time. Cancellations made less than SEVEN business days will be issued a credit memo to be used within two years. Registered attendees who fail to show up or have not given proper notice of cancellation will not receive refund or credit.

REPEAT CUSTOMERS


3M Touch Systems • ABB, Inc. • Abbott Diabetes Care • ABC Packaging • Advance Foods • AES • AGC Automotive • Airite • Allied Signal • Alcoa Power Generating • ARCO • AT&T • BOC Gases • BP Oil • Bridgestone Firestone • Cargill • Caterpillar • Champion International • Chevron • Chrysler Clorox • Coca-Cola • Cooper Tire & Rubber • Dana Corp • DART • Delphi Automotive • Dow Corning • Delco Remy America • Dupont • Eaton Corp ENSR • Exxon Mobil • FedEx • Ford • Frito Lay • GAF • General Electric • General Motors • Genesee Power Station • Georgia Pacific • Goodyear Hallmark Cards • Hewlett Packard • Honeywell • IBM • International Paper • Johnson Controls • Kellogg • Lucent Technologies • Mobil • Moody AFB Monsanto • Nabisco • Oxy USA • PackerWare • Parker Hannifin • Pepsi Cola • Perdue Farms • Pepperidge Farms • Phillip Morris • Playtex • Pillsbury Pratt & Whitney • Proctor & Gamble • PSEG • REA Contracting • Ralston Purina • RJ Reynolds • Rockwell Automation • Sara Lee • Shell Oil Sherwin Williams • Siemens • Smurfit Stone • Teksid Aluminum • Texas Instruments • Timken • Trammel Crow • TRW Tyson Foods • United Technologies • US Airforce • US Army Corp of Engr • US Filter • Walt Disney • Westinghouse • Wheelabrator • Xcel Energy

COURSE OBJECTIVES

Upon successful completion of this course, you will be able to:

- ▶ Explain what constitutes an electrical hazard
- ▶ Apply NFPA 70E when working on or near exposed energized parts
- ▶ Implement safe work practices
- ▶ Select the correct personal protective equipment
- ▶ Explain the different approach boundaries to live parts
- ▶ Calculate a flash protection boundary
You will be able to immediately apply what you have learned on the plant floor.

CONTINUING EDUCATION UNITS (CEUs)

Impact Training Services, Inc. is an authorized provider (#6284) of CEUs. We are accredited by  The International Association of Continuing Education and Training (IACET). Upon successful completion of the course objectives, participation in all learning activities and end-of-course evaluation students will be awarded .7 CEUs.

TRAINING AT YOUR FACILITY

Bring any of Impact Training Services, Inc. electrical training programs to your facility. For more information:

Call 1-800-858-6879

You may also visit us on the web at:

www.impactu.com

COURSES OFFERED:

- ▶ **Reading Electrical Drawings**
- ▶ **Electrical Safety**
- ▶ **Industrial Electricity**
- ▶ **Troubleshooting Electrical Controls**
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Maintenance and Troubleshooting
- ▶ **Programmable Logic Controllers** using
Allen-Bradley SLC 500™ and RSLogix 500™ Software
- ▶ **Programmable Logic Controllers** using
RSLogix 5000™ and ControlLogix™

* Not affiliated with Rockwell Automation

Register today!

ELECTRICAL SAFETY COURSE OUTLINE



**REDUCE
INJURIES
& FINES**

This class will teach you how to implement NFPA 70E "Standard for Electrical Safety in the Workplace" to get in compliance with OSHA 29 CFR Part 1910.331 – 1910.335 "Safety Related Work Practices", which is the electrical safety program you are required by law to set up if your personnel face a risk of electrical shock. OSHA requires this training but is ambiguous about how to accomplish it. NFPA 70E tells you how to accomplish what is required by OSHA and has become a defacto standard. This class will teach you how to meet and implement the electrical safety requirements of OSHA by using NFPA 70E. The class takes NFPA 70E, Chapter 1, Articles 100-130 step-by-step and addresses how to meet the requirements of OSHA 29 CFR Part 1910.331 - 1910.335.

OSHA 29 CFR 1910

1910.331 SCOPE

1910.332 TRAINING

Content

Type of training

Who must be trained

1910.333 SELECTION AND USE OF WORK PRACTICES

General

Working on or near exposed de-energized parts

Working on or near exposed energized parts

1910.334 USE OF EQUIPMENT

Portable electric equipment

Test instruments and equipment

1910.335 SAFEGUARDS FOR PERSONAL PROTECTION

Use of protective equipment

Alerting technique

NFPA 70E - SAFETY RELATED WORK PRACTICES

ARTICLE 100 : DEFINITIONS

ARTICLE 110 : GENERAL REQUIREMENTS FOR ELECTRICAL SAFETY-RELATED WORK PRACTICES

Training requirements

Electrical safety program

Working on/near electrical parts

Use of equipment

ARTICLE 120 : ESTABLISHING AN ELECTRICALLY SAFE WORK CONDITION

Work on equipment that has lockout/tagout devices applied

ARTICLE 130: WORKING ON OR NEAR LIVE PARTS

Approach boundaries

Limited, restricted, prohibited

Calculating flash protection boundaries

Personal protective equipment

WRAP-UP

Review, Q & A

Additional resources

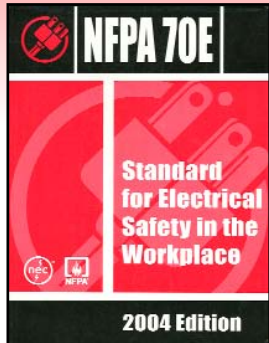
**BRING THIS CLASS TO
YOUR FACILITY**

NOW IN OUR
14TH YEAR!

ONE DAY OF INTENSIVE TRAINING

WORK SAFELY !!!

ELECTRICAL SAFETY



FREE NFPA 70E WITH YOUR PAID REGISTRATION

Seminar Fee:
\$489
per person

THIS CLASS CAN BE TAUGHT AT YOUR FACILITY

Your employees are required by law to be trained

FOUR WAYS TO REGISTER:

- 1) **Internet** www.impactu.com
- 2) **Fax** 502-252-8060
- 3) **Phone** 800-858-6879
- 4) **Mail** this form to:
Impact Training Services, Inc.
PO Box 532, Bloomfield KY 40008



IACET Approved
CEUs available
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Cage Code 4C510

Register for any of our classes using this form.

Student Name _____	Class Date _____	Class Length (circle one)
_____	_____	1-Day 3-Day
_____	_____	1-Day 3-Day
_____	_____	1-Day 3-Day
_____	_____	1-Day 3-Day

Company: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____

Primary Contact: _____

E-Mail: _____

Authorizing manager's name: _____

Check is enclosed for \$ _____

S. Dakota Companies add 4% Sales Tax

Make Checks Payable to:
Impact Training Services, Inc.

Company P.O. # _____

Attention: _____

Credit Card # _____

Name on Card _____

Type of Card _____ Exp. Date ____ / ____

VIP Code _____

Located on front of brochure beneath 2008 Locations

THANK YOU!

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- ▶ Reading Electrical Drawings
- ▶ Electrical Safety
- ▶ Industrial Electricity
- ▶ Troubleshooting Electrical Controls

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