

**Advanced Lighting Controls**

**Session 1**

Days: Tuesdays and Thursdays (18 Sessions)  
Time: 5:00 PM to 8:00 PM  
C.E. Hours: 54 hours  
**Dates: January 17, 2012 to March 15, 2012**  
Class Size: 20 Maximum  
Instructor: Tanya Pitts/Dave Thoni

**Session 2**

Days: Tuesdays and Thursdays (18 Sessions)  
Time: 5:00 PM to 8:00 PM  
C.E. Hours: 54 hours  
**Dates: March 20, 2012 –to May 17, 2012**  
Class Size: 20 Maximum  
Instructor: Tanya Pitts/Dave Thoni

Description: Hands-on instruction for the Journeyman Electrician. This class will focus on the installation and commissioning of the latest efficiency lighting devices and control systems for energy management. Labs will utilize the latest devices from Lightolier, Lutron Watt Stopper and GE. After completion of hours and final exam you will be CALCTP State Certified and Certificates will be issued.

Materials..... \$50.00

*“CALCTP received a \$5,000,000 grant awarded under the American Recovery and Reinvestment Act of 2009: Energy Training and Partnership Grants, as implemented by the U.S. Department of Labor's Employment and Training administration. 100% of the grant funds are used to support this program.”*

**Aerial Lift Safety**

Days: Mondays (2 Sessions)  
Time: 5:00 PM to 8:00 PM  
C.E. Hours: 6 Hours  
**Dates: April 30 and May 7, 2012**  
Class Size: 10 Minimum – 25 Maximum  
Instructor: Joe Buhowsky

Description: Construction workers have the highest number of deaths among major industry groups. Aerial Lift incidents account for a significant portion of these deaths. You will learn current best practices on how to operate and work safely from an aerial lift.

Materials..... \$10.00

**Building Automation Installation**

Days: Mondays (7 Sessions)  
Time: 5:00 PM to 8:00 PM  
C.E. Hours: 21 Hours  
**Dates: January 30 to March 19, 2012 (March 26, 2012 Make-up) (No Class February 20, 2012 – President’s Holiday)**

Class Size: 5 Minimum – 10 Maximum  
Instructor: David Gilfillan

Description:

**Introduction to Building Automation Systems**

The student will gain experience in wiring and integration of different building systems. Hands-on labs feature a variety of technologies including Lonworks, Bacnet and Legacy. Class time will focus on hands-on exercises that provide the skills necessary for success when working on Building Automation Systems.

Required Books:	Building Automation: Control Devices & Applications.....	\$65.00
	Building Automation: Control Devices & Applications Workbook.....	<u>\$25.00</u>
	<b>Total</b>	<b>\$90.00</b>

**2008 Code – Significant Changes**

Days: Wednesdays (2 Sessions)  
Time: 5:00 PM to 8:00 PM  
C.E. Hours: 6 hours  
**Dates: May 2 and May 9, 2012**  
Class Size: 10 Minimum – 25 Maximum  
Instructor: Paul Rodgers

Description: Significant changes to the National Electrical Code based on the 2008 NEC.

Required Book:	Illustrated Changes to the NEC 2008 ed. ....	\$57.00
Suggested Book:	NEC Code Book – 2008.....	<u>\$75.00</u>

**Total depends on which books need to be purchased**

**Conduit Bending**

Days: Tuesdays (14 Sessions)  
Time: 5:00 PM to 8:00 PM  
C.E. Hours: 42 hours  
**Dates: January 31 to May 1, 2012**  
Class Size: 5 Minimum – 10 Maximum  
Instructor: Aaron Stagg

Description: This hands-on course will provide training necessary for bending ½” to 2-1/2” EMT, rigid conduit, and large conduit, with the use of EMT, Hickey and Chicago Benders.

**Bring your: Tape measure, Torpedo level, Hacksaw, Protractor, Pencil and optional “No Dog.”**

Required Books:	Electrician’s Guide to Conduit Bending.....	\$12.00
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**Confined Space Training**

Days: Saturday (1 Session)  
Time: 8 AM – 4:30 PM  
C.E. Hours: 8 hours  
**Dates: April 7, 2012**  
Class Size: 7 Minimum – 15 Maximum  
Instructor: Joe Buhowsky

Description: This course will cover permit and non-permit confined space and safety requirements, OSHA regulations and protective equipment. Class includes use of air sampling device and confined space entry, with retrieval equipment.

**This training does not qualify employees to enter Permit-Required Confined Spaces.**

Materials..... \$10.00

**CPR / First Aid**

Days: Saturday (1 Session)  
Time: 8:00 AM to 2:30 PM  
C.E. Hours: 6 hours  
**Dates: February 11, 2012 or March 3, 2012 or April 21, 2012 or May 5, 2012**  
Class Size: 6 Minimum – 12 Maximum  
Instructor: Paul Rodgers

Description: Certification in emergency response CPR and Basic First Aid.

Required Costs: Red Cross First Aid/CPR Cards and Information Card..... \$20.00  
Optional Material: AED Med Products (Face guard)..... \$10.00  
**Total depends on what is purchased**

**Electrical Detailing**

Days: Mondays and Wednesdays (12 Sessions)  
Time: 5:00 PM to 7:00 PM  
C.E. Hours: 24 hours  
**Dates: Monday, January 30 to Monday, March 12, 2012 (No Class February 20, 2012 – President’s Holiday)**  
Class Size: 10 Minimum – 20 Maximum  
Instructor: Bob Wright

Description: Detailing of Electrical Installations, combining information from Architectural, Civil and Electrical Prints for the beginning Foreman.

Detailing kit. .... \$50.00

**EVITP (Electrical Vehicle Infrastructure Training Program)**

Days: Mondays (11 Sessions)  
Time: 5:00 PM to 8:00 PM  
C.E. Hours: 33 hours  
**Dates: January 30, 2012 to April 16, 2012 (No Class February 20, 2012 – President’s Holiday)**

Class Size: 10 Minimum – 20 Maximum  
Instructor: Joe Buhowsky

Description: EVITP is a national collaboration with Automobile Manufacturers, Electric Vehicle Supply Equipment Manufacturers, Utilities, and Industry stakeholders to develop and provide instruction for state certified/licensed electricians for the emerging Electric Vehicle market. This course includes both classroom instruction and hands-on laboratory practicum. Key topics include: Customer Relations, Site Assessments, Code Requirements, Load Calculation, EVSE equipment, and Lab Practicum. Hands-on demonstration and load calculation test and a final written exam are required for certification. PPE and calculators will be provided

Required Books: NEC Code Book 2011..... \$75.00  
Material Costs: Binder..... \$25.00  
**Total depends on what is purchased**

**Fire Alarm Hands-On & Code**

Days: Saturdays (3 Sessions)  
Time: 8:00 AM to 2:00 PM  
C.E. Hours: 18 hours (12 hours lecture, 6 hours lab)  
**Dates: March 3, March 10 and March 17, 2012**  
Class Size: 10 Minimum – 20 Maximum  
Instructor: Donald Dones

Description: Students will pull wire, terminate, activate and troubleshoot a fire alarm system. This class will also help prepare students for the California State Fire Alarm Certification. Topics include the placement and utilization of equipment, sizing of components and calculations.

Required Books:  
NFPA 72 (2002 edition)..... \$83.00  
Bring 2002 NEC Code Book as a Reference

**Advanced Fire Alarm Hands-On & Code**

**Session 1**

Days: Saturdays (3 Sessions)  
Time: 8:00 AM to 2:00 PM  
C.E. Hours: 18 hours (12 hours lecture, 6 hours lab)  
**Dates: March 24, March 31, and April 7, 2012**  
Class Size: 10 Minimum – 20 Maximum  
Instructor: Donald Dones

**Session 2**

Days: Thursdays (6 Sessions)  
Time: 5:00 PM to 8:00 PM  
C.E. Hours: 18 hours (12 hours lecture, 6 hours lab)  
**Dates: April 12, April 19, April 26, May 3, May 10 and May 17, 2012**  
Class Size: 10 Minimum – 20 Maximum  
Instructor: Donald Dones

Description: Advanced Maneuvering through the 2010 NFPA Code Book. Advance wiring and programming of Fire Alarm Systems.

Prerequisite: Fire Alarm Hands-on and Code

Required Books:  
NFPA 72 (2010 edition)..... \$83.00  
Bring 2011 NEC Code Book as a Reference

**Motor Control - Beginning**

Days: Tuesdays (12 Sessions)  
Time: 5:00 PM to 8:00 PM  
C.E. Hours: 42 hours  
**Dates: January 31 to April 17, 2012**  
Class Size: 7 Minimum – 15 Maximum  
Instructor: Chico Hernandez

Description: Lecture and hands-on training/wiring on magnetic motor starters, timers, relays, control devices along with NEC Article 430

Required Books: Understanding Basic Motor Controls ..... \$40.00

**Motor Control Advanced – 2**

Days: Thursdays (14 Sessions)  
Time: 5:00 PM to 8:00 PM  
C.E. Hours: 42 hours  
Dates: **February 2 to May 3, 2012**

Class Size: 6 Minimum – 12 Maximum  
Instructor: Jim Guthrie

Description: Introduction to Integrated Motor Control Systems  
Introduction to PLC Operation and Programming\*.

**\*Prerequisite: Advanced Motor Control – 1, or passing the Motor Control Advanced - 1 final examination**

Required Books: LogixPro workbook.....	\$65.00
AJATC Binder .....	<u>\$10.00</u>
<b>Total</b>	<b>\$75.00</b>

**Motor Control Advanced – 5 & 6 (Buss Communications and Skills Projects)**

Days: Tuesdays (14 Sessions)  
Time: 5:00 PM to 8:00 PM  
C.E. Hours: 42 hours  
Dates: **January 31 to May 1, 2012**

Class Size: 6 Minimum – 12 Maximum  
Instructor: Jim Guthrie

Description: Learn how PLC’s communicate to VFD’s through serial buss communications. Also, design and build a personal hands-on project based upon the information taught in class.\*

**(\*Prerequisite:Must have taken Advanced Motor Control 1, 2, 3 & 4 or anyone who has had extensive field experience in PLC’s and VFD’s to the satisfaction of the Instructor.)**

Required Books: Electric Motor Drives.....	\$50.00
AJATC Binder .....	<u>\$10.00</u>
<b>No charge if you already have the Electric Motor Drives Text/Binder (Please still register for the class even if you have the books)</b>	

**NFPA 70E**

Days: Wednesdays (4 Sessions)  
Time: 5:00 PM to 8:00 PM  
C.E. Hours: 12 hours  
Dates: **April 25, May 2, May 9 and May 16, 2012**  
Class Size: 10 Minimum – 25 Maximum  
Instructor: Joe Buhowsky

Description: This course will focus on the NFPA 70E standard for electrical safety in the workplace. Topics include hazard assessment, energized work permits, PPE selection and limitations.

Required Books: NFPA 70E Code Book (2009 Ed.).....	\$50.00
Electrical Safety-Related Work Practices Text.....	<u>\$37.00</u>

**OSHA 10**

Days: Wednesdays (4 Sessions)  
Time: 5:00 PM to 8:00 PM  
C.E. Hours: 12 hours  
Dates: **February 1, February 8, February 15 and February 22, 2012**  
Class Size: 10 Minimum – 25 Maximum  
Instructor: Joe Buhowsky

Description: This course will familiarize students with occupational and health hazards related to the construction industry.

**OSHA-10 card issued upon successful completion of all four classes.**

Required Costs:	Osha-10/30 Card.....	\$5.00
Material Cost:	Binder.....	<u>\$15.00</u>
	<b>Total</b>	<b>\$20.00</b>

**OSHA 30**

Days: Wednesdays (10 Sessions) (The first four sessions of this class meet with OSHA 10)  
Time: 5:00 PM to 8:00 PM  
C.E. Hours: 30 hours  
Dates: **February 29 to April 4, 2012**  
Class Size: 10 Minimum – 25 maximum  
Instructor: Joe Buhowsky

Description: This 30-hour safety course is based upon the OSHA Standards for the Construction Industry (29 CFR 1926) covering but not limited to Fire Protection Prevention, Hand Powered Tools, Scaffolds, Most Frequently Cited Violations, Fall Protection, Excavation and Trenching.

**OSHA-30 card issued upon successful completion of OSHA 10 and OSHA 30 classes.**

(\*You need to have taken OSHA 10 within six months of the start date and with the same instructor, in order to get an OSHA 30 card.)

Required Materials: OSHA 10 & OSHA 30 use the same Materials – total for both classes.....\$20.00

**Solar Photovoltaics**

Lecture: Days: Saturdays (4 Sessions)  
Times: 8:00 AM to 4:30 PM  
Dates: **April 14, April 21, April 28 and May 5, 2012**  
C.E. Hours: 32 hours  
Class Size: 7 Minimum – 14 Maximum  
Instructor: Bill Kenney

Description: This course will teach electricians how to design, install and maintain a Solar Photovoltaic System on a residential or commercial building.

Required Books: 202011 Understanding NEC Requirements for Solar Photovoltaic Systems.....\$ 46.00

**Test Instruments**

Days: Wednesdays (5 Sessions)  
Time: 5:00 PM to 8:00 PM  
C.E. Hours: 15 hours  
Dates: **March 21 to April 18, 2012**

Class Size: 6 Minimum – 12 Maximum  
Instructor: Floyd Colton

Description: Learn the proper use of multi-meters, circuit analyzers, meggers and more.

Required Books: Test Instruments Application Manual – ATP/Mazur ..... \$38.00

**Traffic Signals**

Days: Saturdays (3 Sessions)  
Time: 8:00 AM to 2:30 PM  
C.E. Hours: 18 hours  
Dates: **January 28, February 4, and February 11, 2012**  
Class Size: 8 Minimum – 16 Maximum  
Instructor: Kurt Dembrowicz

Description: This course will teach students how to properly install traffic signal wiring projects and street lighting installation. This hands-on course will utilize the Traffic Signal Intersection at the Training Center.  
In addition, learn about local and Caltrans codes, erection of light poles, constructing pole bases and drilling will also be covered. **Bring your Hand Tools.**

Materials..... \$50.00