

Northwest Washington Electrical Industry JATC, Winter/Spring 2012 Classes

**** Classes Are Available for IBEW Members and Contractors Only*

2011 NEC Code Update 8 hours CEU, no text required, 2011 NEC Code Book \$61.58, IAEI Analysis of Changes text \$52.37. Required for all WA license renewals.

****Introduction to Building Automation** 16 hour class (12 hours CEU), no text. Covers operation, signaling and functions of common sensors, actuators and other control devices used in building automation / energy management systems. The market for these systems will be expanding with the push for energy conservation.

Conductor Installations 4 hours CEU, no text. An overview of the requirements of the NEC dealing with the installation of conductors contained in Articles 100, 110, 215, 250, 300, 310 and 408.

Conduit Bending, 16 hour class (12 hours CEU), ***Required Reference Guide Text \$14.96***. Covers conduit bending procedures and methods, including layout and calculations, use of hand and power benders and advanced bending techniques.

Data and Communication Cabling for Electricians 8 hours CEU, no text. Designed for electricians with limited, or no, experience with data and communication cabling installation. Covers theory, materials and installation practices. Includes hands on cable termination.

Electrical Grounding 8 hours CEU, no text required. Covers the fundamentals of grounding and bonding and the requirements of NEC Article 250.

***Introduction to Electric Vehicles** 4 hours CEU, no text. This course will introduce Electric Vehicle Supply Equipment (EVSE) and its installation to the Electrician. *This course is a prerequisite to the EVITP Certification course.*

***Electric Vehicle Infrastructure Training Program (EVITP) Certification Prerequisite: Introduction to Electric Vehicles**, 20 hour class, 12 hours CEU, no text. With completion of the course and passing of a written exam students will receive EVITP Certification (must be Electrical Journeyman or Administrator).

Introduction to Fiber Optics** 8 hours CEU, ***Required text \$28.93. Covers terminology, components, design types and uses, connectors and splices. An advanced class is planned for next year, for which this class is a prerequisite, which will allow students to acquire The Fiber Optic Association Certified Fiber Optic Technician certification upon passing the written examination.

Fire Alarms 16 hour class (12 hours CEU), no text. Covers basic definitions and system types, installation practices and fire alarm codes and standards. **No AK CEUs.**

First Aid/CPR 4 hours CEU (class takes about 6 hours), no text. Red Cross or American Heart Association certification. **No AK CEUs.**

Fundamentals of Instrumentation** 80 hour class (12 hours CEU), ***Required Texts and Manuals \$134.09. Class dates: Jan 21,28; Feb 11,18; Mar 3,10,24,31, Apr 14,21. Students expected to take the EPRI Part A written exam on May 12, upon completion of course. A Part B (hands on) preparatory class and exams will be held for those passing the Part A exam. Both Part A and Part B exams must be passed for full EPRI instrumentation technician certification. ***The class is limited to 8 students and requires special application form. Contact JATC for application form for this class.***

Hazardous Locations 4 hours CEU, no text. An overview of the requirements of NEC Articles 500-516.

3M Medium Voltage Cable Splicing** 16 hour class (no CEU), \$150.00 tool and material charge (includes cable prep tools that student keeps), Training by 3M rep. enables, upon demonstrating competency, to be certified in 3M MV termination, splice, load break elbow and 600A T splice. ***The class is limited to 12 students and requires special application form. Contact JATC for application form for this class.

Motor Control 16 hour Class(12 CEU), no text. Covers the fundamental concepts of motor control, including theory, diagrams and devices.

NFPA 70E - Electrical Safety Related Work Practices 8 hours CEU, no text required, NFPA 70E \$49.49. Covers NFPA 70E and the requirements for recognition of, and protection from, hazards associated with working on or near energized circuits.

****Introduction to Photovoltaic Systems** 8 hours CEU. No required text. Covers the principles of photovoltaics, along with an overview of system advantages/disadvantages, installation practices and NEC requirements. Available Text \$69.06 (also used in PV Design class)

****Photovoltaic System Installation Prerequisite: Intro. to Photovoltaic Systems**, 16 hour class (12 hours CEU), Covers component operation, installation practices and NEC requirements. Includes hands-on installation experience.

****Photovoltaic System Design Prerequisite: Photovoltaic System Installation, Required Text \$69.06.** 16 hour class . Covers site evaluation and survey, PV system design and sizing. **No WA CEUs.**

***Introduction to Programmable Logic Controllers (PLCs)** 16 hour class (12 CEU), no text. Covers the basics of PLC fundamentals and system installation, as well as the use of PC-based programming software. Requires familiarity with MS Windows.

OSHA 10 Safety Training No text. Construction safety training. Required to work at all oil refineries and Intalco. **No WA or AK CEUs.**

RCW/WAC Update 4 hours CEU, no text. Copies of RCW/WAC \$10.82. Required for all WA license renewals. **No AK or OR CEUs.**

Rigging and Signaling 16 hour class (no CEU), ***Required Text and Workbook \$73.67. Text is required to be purchased and studied at least 1 week prior to class in order to be able to pass written exam, after only 2 class days.*** After completing course and passing exam, students will be issued an NJATC Qualified Rigger/Signal Person certificate and card.

Test Instruments 8 hours CEU, no text. Covers how to select and use various types of electrical test instruments, including meter safety. Includes hands-on practice in the use of various types of meters.

Transformers 8 hours CEU, no text. Covers fundamentals of theory, types, connections and applications of various types of transformers.

NOTE: BOOK PRICES INCLUDE 8.2% SALES TAX

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