

# Journeyman Class Schedule



San Diego Electrical Training Center  
4675 Viewridge Avenue  
San Diego, CA 92123-1644

Spring 2018 semester  
Vol. 2018-1 tri-annual

The classes listed in this schedule are designed for I.B.E.W. Local 569 members who wish to further their education. If you are interested in attending Journeyman classes at the Training Center, please read through this schedule and follow the simple registration instructions.

To register for classes: (1) **On-line** at [www.sdeett.org/all-classes/](http://www.sdeett.org/all-classes/)  
(2) By **telephone**: **San Diego classes:** (858) 569-6633, select option 3 then 2.  
**Imperial County classes:** (760) 355-3000.

**Bookstore hours:** 2:30-5:00pm during the first night of class. All other times, bookstore hours are from 3:30-4:30pm. No weekends!

## AC THEORY

This course is designed to teach the fundamentals of AC theory. It covers basic concepts of inductance, capacitance, and impedance, as well as transformer theory and single- and three-phase electrical systems.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
F	04/13	1	4:30-8pm	101	San Diego	Collier
Sat	05/05	1	1-4:30pm	IVETC	Imperial*	Collier

\*class will be held at the Imperial County Electrical Training Center, 2420 Imperial Business Park Drive, Imperial, CA 92251

## BASIC CPR, AED AND FIRST AID FOR ADULTS

Certification in CPR, AED and First Aid – card is good for two years. Participants learn to recognize several life-threatening emergencies, provide CPR, use of AED, and relieve choking.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
F	01/26	1	4:30-8:30pm	IVETC	Imperial*	Cantu
T	02/06	1	4:30-8:30pm	IVETC	Imperial*	Cantu
T	02/27	1	4:30-8:30pm	203	San Diego	Cole
W	02/28	1	4:30-8:30pm	203	San Diego	Cole
T	03/06	1	4:30-8:30pm	203	San Diego	Cole
F	03/09	1	4:30-8:30pm	IVETC	Imperial*	Cantu
W	03/07	1	4:30-8:30pm	203	San Diego	Cole
T	03/13	1	4:30-8:30pm	203	San Diego	Cole
W	03/14	1	4:30-8:30pm	203	San Diego	Cole
T	03/20	1	4:30-8:30pm	203	San Diego	Cole
W	03/21	1	4:30-8:30pm	203	San Diego	Cole
T	03/27	1	4:30-8:30pm	203	San Diego	Cole
W	03/28	1	4:30-8:30pm	203	San Diego	Cole

\*class will be held at the Imperial County Electrical Training Center, 2420 Imperial Business Park Drive, Imperial, CA 92251

## BASIC FOREMANSHIP

Entry-level foremen or those who wish to move into a foreman role will greatly benefit from Basic Foremanship. This course covers essential topics for early-career foreman, such as the foreman's role, documentation, mobilizing the job for success, maintaining a safe job and project closeout. This blended learning course will be a combination of online modules that are taken before in-seat discussion sessions. Participants are required to complete these online modules and actively participate in the in-seat learning group discussions.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
M	02/26-03/19	4	5-8:30pm	203	San Diego	Coyle

## **BASIC TRANSFORMER OPERATIONS & INSTALLATION**

This course covers the theory, operation, application, maintenance, installation and testing of transformers rated 600 volts or less. Topics included were transformer fundamentals, transformer ratings, overcurrent protection for transformers, and the NEC grounding & installation requirements. Students have learned safe and proper maintenance and testing procedures for pad-mounted, transformers. This course has covered transformers used in commercial and industrial power systems, nameplate information, tap changer maintenance, ac testing, routine inspections and testing are covered in detail. Students have learned how to perform the major tests that are required to ensure safe and efficient operation.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
Sat	01/20	1	9-4:30pm	IVETC	Imperial*	Collier

*\*class will be held at the Imperial County Electrical Training Center, 2420 Imperial Business Park Drive, Imperial, CA 92251*

## **CALCTP (California Advanced Lighting Control Training Program) ACCEPTANCE TECHNICIAN**

PRE-REQUISITE: Successfully completion of the CALCTP Technical or Systems course. Student must download and submit Application for CALCTP-AT Technician (<https://www.calctp.org/acceptance-technicians-become>) and submit to the organization listed on the application (ICF International) prior to enrollment. Once the application is approved, it must be presented to the Training Center prior to enrollment in the CALCTP-AT course. This California Advanced Lighting Controls Training Program-Acceptance Technician (CALCTP-AT) certifies acceptance technician contractors and technicians. The course consists of the online prerequisites, lecture and a final exam.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
MW	01/29-02/26	8	5-8:30pm	201	San Diego	Tabbert

## **CODE CALCULATIONS: CONDUCTOR AMPACITY**

This course covers Section 310.15 of the NEC (National Electric Code) which covers Ampacities for Conductors Rated 0-2000 volts. All participants will become familiar with Table 310.13 for Conductor Application and Insulation, 310.15(B)(2)(a) Adjustment Factors for More Than 3 Current Carrying Conductors in a Raceway, Table 310.15(B)(6) Conductor Types and Sizes for 120/240, 3-wire, Single Phase Dwelling Services and Feeders. NOTE: Please bring a code book and calculator to class.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
Sat	04/07	1	9-12:30pm	IVETC	Imperial*	Collier

*\*class will be held at the Imperial County Electrical Training Center, 2420 Imperial Business Park Drive, Imperial, CA 92251*

## **CODE CALCULATIONS: RACEWAY FILL**

The NEC Code Calculations: Raceway Fill course covers basic procedures on how to select the proper size raceway based on insulation type, size and number of conductors installed in a raceway.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
Sat	04/07	1	1-4:30pm	IVETC	Imperial*	Collier

*\*class will be held at the Imperial County Electrical Training Center, 2420 Imperial Business Park Drive, Imperial, CA 92251*

## **CODE CALCULATIONS: VOLTAGE DROP**

This course introduces the student to equations used to calculate resistance and voltage drop based on Table 8, Chapter 9 of the NEC (National Electrical Code). All participants will become familiar with Table 8 of Chapter 9, Conductor Properties and Table 310.16 Allowable Ampacities of Insulated Conductors Rated 0 through 2000 Volts. Students will be taught how to calculate the resistance of a given wire size using the resistance equations based on the code book values of Table 8, Chapter 9 and how to use that resistance value to calculate the voltage drop for an electrical circuit. NOTE: Please bring a code book and calculator to class.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
F	01/26	1	4:30-8pm	101	San Diego	Collier

## **CONDUIT BENDING**

The Conduit Bending course is designed to teach the student to bend conduit with accuracy and speed. Each student receives hands-on experience as well as classroom instruction.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
MW	02/26-03/07	4	5-8:30pm	IVETC	Imperial*	Mills

*\*class will be held at the Imperial County Electrical Training Center, 2420 Imperial Business Park Drive, Imperial, CA 92251*

## **CONFINED SPACE ENTRY HAZARD AWARENESS**

This course teaches workers about the most common hazards found in confined spaces, and about the OSHA standards (29 CFR Part 1926 for construction & 29 CFR Part 1910 for the general industry) that addresses these hazards. The course also teaches the worker how to use the NIOSH (National Institute for Occupational Safety and Health) Pocket Guide to Chemical Hazards which contains key information and data for 677 chemicals or substances commonly found in the work environment. Participants have learned about safe entry procedures, monitoring principles; entry permits procedures, proper ventilation methods, personal protective equipment, and the roles of the entrant, attendant, and entry supervisor.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
F	01/12	1	4:30-8pm	101	San Diego	Collier

## **DC THEORY**

This course covers the basics of circuit design, measurement and calculation.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
F	03/23	1	4:30-8pm	101	San Diego	Collier
Sat	05/05	1	9-12:30pm	IVETC	Imperial*	Collier

*\*class will be held at the Imperial County Electrical Training Center, 2420 Imperial Business Park Drive, Imperial, CA 92251*

## **ELECTRIC VEHICLE INFRASTRUCTURE TRAINING PROGRAM (EVITP)**

NOTE: EVITP certifications will only be issued by EVITP to CA state-certified general electricians with a passing score on the EVITP final exam and a minimum of 18 hours of attendance. The Electric Vehicle Infrastructure Training Program (EVITP) has been established to provide the Electric Vehicle Transportation sector of the electrical industry, and all stakeholders, a structured platform to facilitate training and certification for the installation of Electric Vehicle Supply Equipment (EVSE) across Residential and Commercial/Public markets. The program addresses the technical requirements, safety imperatives and performance integrity of industry partners. Students must pass the hands-on and written to successfully complete the course.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
MW	02/28-03/26	8	5-8:30pm	201	San Diego	Monahan

## **ELECTRICAL REQUIREMENTS FOR HEALTH CARE FACILITIES, NEC ARTICLE 517**

This course covers National Electrical Code (NEC) requirements for electrical installations in health care facilities. Health care facility installations differ from other installations in many important ways. Article 517 addresses areas that involve examination and treatment of patients and includes both permanent and movable facilities. Many specialized definitions that only apply to health care facilities will be explained.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
F	02/09	1	4:30-8pm	101	San Diego	Collier

## **ELECTRICAL REVIEW**

This class uses Mike Holt's Electrical Exam Preparation book for a comprehensive review of electrical fundamentals and the National Electric Code. Each of the sessions is stand-alone – allowing students to join the class at any point throughout the course. This course covers basic electrical theory with an emphasis on its application under guidelines of the NEC.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
MW	01/08-02/12	10	5-8:30pm	IVETC	Imperial*	Miranda
M	01/29-04/09	10	5-8:30pm	108	San Diego	Volper

*\*class will be held at the Imperial County Electrical Training Center, 2420 Imperial Business Park Drive, Imperial, CA 92251*

## **GROUNDING AND BONDING OF ELECTRICAL SYSTEMS**

This course is designed to improve power quality, save lives and prevent damage to buildings and electrical equipment by providing the participants with the fundamental concepts of grounding & bonding based on the requirements contained in the 2014 NEC (National Electrical Code). Some of the topics that will be discussed during this period of instructions include: electrical shock hazards and the effect of electricity on the human body; systems required to be grounded from those that are not; general grounding & bonding concepts; grounding & bonding terms and definitions used in the NEC; the performance criteria of grounding & bonding; the general requirements for equipment grounding, equipment grounding conductors, grounding electrode conductors, and bonding conductors; function and sizing of bond jumpers; sizing and installation grounding requirements for equipment; basic concepts of

lightning protection systems. For this course, it is recommended that all participants bring with them a calculator and a copy of the 2014 NEC to complete this class.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
Sat	03/17	1	9-4:30pm	IVETC	Imperial*	Collier

*\*class will be held at the Imperial County Electrical Training Center, 2420 Imperial Business Park Drive, Imperial, CA 92251*

### **INTRODUCTION TO INSTRUMENTATION**

This class provides students with a more advanced understanding of instrumentation and control, covering temperature, pressure, flow, and level detection (process control) systems; their principles of operation, and strategies for installation, maintenance, and troubleshooting of these systems.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
Sat	02/03-03/10	5	8-2:30pm	208	San Diego	Fleckenstein

### **NFPA-70E, ARC FLASH HAZARD AWARENESS**

This is a comprehensive training session that covers OSHA Standard CFR 1910.331 - 1910-335. This NFPA 70E Electrical Arc Flash Hazard Awareness course will provide the student with the necessary knowledge to make sound decisions and institute safe work practices. Students will learn safe work practices and procedures and as a result, be able to recognize dangerous situations and avoid certain hazards before an incident occurs. They will also learn the safe approach distances to exposed electrical conductors. At the end of this training session, they will be able to determine the proper Personal Protective Equipment (PPE) for most situations or working condition encountered. Every student will leave this class with a much better understanding of the hazards they encounter every day and a newfound respect for electricity.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
Sat	02/17	1	9-4:30pm	IVETC	Imperial*	Collier

*\*class will be held at the Imperial County Electrical Training Center, 2420 Imperial Business Park Drive, Imperial, CA 92251*

### **OSHA 30 (in Spanish)**

Student is required to order the free textbook and bring to class. The curriculum structure mandated by Fed OSHA is closely followed in the aspects of construction safety. This Cal/OSHA course reviews standards, procedures and policies for construction workers in California. Course will be conducted in Spanish.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
TTH	02/27-03/29	10	5-8:30pm	IVETC	Imperial*	Miranda

*\*class will be held at the Imperial County Electrical Training Center, 2420 Imperial Business Park Drive, Imperial, CA 92251*

### **OSHA 30/EM-385 CONSTRUCTION HAZARD AWARENESS**

The curriculum structure mandated by Fed OSHA is closely followed in the aspects of construction safety. This Cal/OSHA course reviews standards, procedures and policies for construction workers in California. The course also covers GHS Classification and Labeling of Chemicals, general safety awareness, required procedures, content and structure of the USACE Engineering Manual "EM-385-1-1-2008" Safety requirements and the 29 CFR Park 1926 Federal OSHA's Safety and Health Requirements for Construction. To order your free copy: Email [hector.n.hunt@usace.army.mil](mailto:hector.n.hunt@usace.army.mil) and request a FREE copy of the EM-385-1-1 Army Corp of Engineers Safety Manual. Provide your name and mailing address. **Allow 5-7 business days for shipping.** Student is required to order the free textbook and bring to class.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
TTH	02/27-04/12	14	5-8:30pm	204/214	San Diego	Mills

### **RIGGING/CRANE SAFETY**

This course will cover risk management and the basic rigging plan; basic rigging principles and load control; loads on rigging and the rigging triangle; application of hardware and application of slings; crane safety.

Day(s)	Dates	# of Sessions	Time	Room	Location	Instructor
F	03/09	1	4:30-8pm	101	San Diego	Collier

### **SAFE ELECTRICAL WORK PRACTICES FOR TRANSFORMER TESTING & MEGGERING**

LOTO, how insulation resistance is measured, factors affecting insulation resistance reading, test voltage vs. equipment rating, basic meter use and meter safety (megohm meter & digital multimeter), how to connect test instruments for safe testing of electrical equipment, test using multi-voltage megger insulation testers.

<b>Day(s)</b>	<b>Dates</b>	<b># of Sessions</b>	<b>Time</b>	<b>Room</b>	<b>Location</b>	<b>Instructor</b>
F	02/23	1	4:30-8pm	101	San Diego	Collier

### **WELDING I: BASICS**

This course is designed to develop the students welding skills and techniques. All safety aspects of welding are covered as well as basic metallurgy and understanding the operation and limitations of today's welders. By practicing on the machines, each student learns all welding positions including horizontal, vertical, overhead and flat.

<b>Day(s)</b>	<b>Dates</b>	<b># of Sessions</b>	<b>Time</b>	<b>Room</b>	<b>Location</b>	<b>Instructor</b>
F	01/26-03/02	5	4:30-7:30pm	Shop 1	San Diego	Bennett

\*NO CLASS ON 2/19

### **WELDING II: FABRICATION**

Pre-requisite: Successful completion of Welding I. This course is designed to further develop the students' welding skills and techniques. All safety aspects of welding are covered.

<b>Day(s)</b>	<b>Dates</b>	<b># of Sessions</b>	<b>Time</b>	<b>Room</b>	<b>Location</b>	<b>Instructor</b>
F	03/09-04/06	6	4:30-7:30pm	Shop 1	San Diego	Bennett

### **YOUR HEALTH & WELFARE PLAN**

The San Diego Electrical Health & Welfare Trust will provide a presentation on Plan Benefits relating to your current healthcare coverage. Presentation will include highlights outlining some of the benefits, rules and regulations, Plan provisions, cost-containment programs and relevant information specific to your Plan.

<b>Day(s)</b>	<b>Dates</b>	<b># of Sessions</b>	<b>Time</b>	<b>Room</b>	<b>Location</b>	<b>Instructor</b>
T	01/23	1	5-7pm	201	San Diego	Morfoot

### **YOUR PENSION PLAN**

The San Diego Electrical Pension Trust will provide a presentation on details relating to your current pension plan.

<b>Day(s)</b>	<b>Dates</b>	<b># of Sessions</b>	<b>Time</b>	<b>Room</b>	<b>Location</b>	<b>Instructor</b>
T	01/30	1	5-7pm	201	San Diego	Morfoot

---

## **NOTICE**

Name of Plan: San Diego Electrical Training Trust  
Plan EIN: 95-3072483  
Plan Administrator: Kevin Johnson

Any employee of any employer contributing to the Apprenticeship and Training Plan may be eligible to enroll in any course or program of study sponsored or established by the Plan.

Any interested individuals can obtain:

- A description of any existing or anticipated future course of study sponsored or established by the Plan;
- Information concerning prerequisites for enrolling in such course;
- A description of the procedure by which to enroll in such course;
- A copy of this notice,

By contacting: San Diego Electrical Training Trust, 4675 Viewridge Avenue, San Diego, CA 92123

## CLASS SCHEDULE BY LOCATION BY DATE

### SAN DIEGO

Start Date	End Date	Days	Class ID	Description
01/12/2018	01/12/2018	Fri	2018J18191	Confined Space Entry Hazard Awareness
01/23/2018	01/23/2018	Tue	2018J18001	Your Health & Welfare Plan
01/26/2018	01/26/2018	Fri	2018J18361	Code Calculations: Voltage Drop
01/26/2018	03/02/2018	Fri	2018J16201	Welding I: Basics
01/29/2018	02/26/2018	Mon/Wed	2018J18311	CALCTP Acceptance Technician (AT)
01/30/2018	01/30/2018	Tue	2018J17991	Your Pension Plan
01/31/2018	04/04/2018	Wed	2018J17622	Electrical Review
02/03/2018	03/10/2018	Sat	2018J17101	Introduction to Instrumentation
02/09/2018	02/09/2018	Fri	2018J16631	Electrical Requirements for Healthcare Facilities, NEC Article 517
02/23/2018	02/23/2018	Fri	2018J18201	Safe Electrical Work Practices For Transformer Testing & Meggering
02/26/2018	03/19/2018	Mon	2018J18381	Basic Foremanship
02/27/2018	02/27/2018	Tue	2018J161804	Basic CPR, AED And First Aid For Adults
02/27/2018	04/12/2018	Tue/Thu	2018J17441	OSHA 30/EM-385 Construction Hazard Awareness
02/28/2018	02/28/2018	Wed	2018J161805	Basic CPR, AED And First Aid For Adults
02/28/2018	03/26/2018	Mon/Wed	2018J16021	Electric Vehicle Infrastructure Training Program (EVITP)
03/06/2018	03/06/2018	Tue	2018J161806	Basic CPR, AED And First Aid For Adults
03/07/2018	03/07/2018	Wed	2018J161807	Basic CPR, AED And First Aid For Adults
03/09/2018	03/09/2018	Fri	2018J17781	Rigging/Crane Safety
03/09/2018	04/06/2018	Fri	2018J16211	Welding II: Fabrication
03/13/2018	03/13/2018	Tue	2018J161808	Basic CPR, AED And First Aid For Adults
03/14/2018	03/14/2018	Wed	2018J161809	Basic CPR, AED And First Aid For Adults
03/20/2018	03/20/2018	Tue	2018J161810	Basic CPR, AED And First Aid For Adults
03/21/2018	03/21/2018	Wed	2018J161811	Basic CPR, AED And First Aid For Adults
03/23/2018	03/23/2018	Fri	2018J16652	DC Theory
03/27/2018	03/27/2018	Tue	2018J161812	Basic CPR, AED And First Aid For Adults
03/28/2018	03/28/2018	Wed	2018J161813	Basic CPR, AED And First Aid For Adults
04/13/2018	04/13/2018	Fri	2018J16702	AC Theory

## IMPERIAL VALLEY

Start Date	End Date	Days	Class ID	Description
01/08/2018	02/12/2018	Mon/Wed	2018J17621	Electrical Review
01/20/2018	01/20/2018	Sat	2018J16571	Basic Transformer Operations & Installation
01/26/2018	01/26/2018	Fri	2018J161801	Basic CPR, AED And First Aid For Adults
02/06/2018	02/06/2018	Tue	2018J161802	Basic CPR, AED And First Aid For Adults
02/17/2018	02/17/2018	Sat	2018J17721	NFPA 70E Arc Flash Hazard Awareness
02/26/2018	03/07/2018	Mon/Wed	2018J16351	Conduit Bending
02/27/2018	03/29/2018	Tue/Thu	2018J17401	OSHA 30 in Spanish
03/09/2018	03/09/2018	Fri	2018J161803	Basic CPR, AED And First Aid For Adults
03/17/2018	03/17/2018	Sat	2018J16901	Grounding and Bonding of Electrical Systems
04/07/2018	04/07/2018	Sat	2018J38351	Code Calculations: Conductor Ampacity
04/07/2018	04/07/2018	Sat	2018J18371	Code Calculations: Raceway Fill
05/05/2018	05/05/2018	Sat	2018J16701	AC Theory
05/05/2018	05/05/2018	Sat	2018J16651	DC Theory

---

## REGISTER NOW FOR ELECTRICIAN TRAINEE CLASSES

Classes start January 20, 2018.

To legally work for a C-10 electrical contractor, a person must be one of the following: certified by having taken and passed the exam or an apprentice in a state approved program or an electrician trainee.

If a person wants to perform electrical work for a C-10 contractor and does not yet qualify to take the certification exam because of lack of work experience or related instruction, can do so legally by registering as an electrician trainee.

An electrician trainee must be enrolled in a state approved school and under the supervision of a certified electrician that supervises only one electrician trainee. The San Diego Electrical Training Center is an approved school and offers electrician trainee classes in San Diego and Imperial Valley.

## Teachers Needed

Would you like to pass on the knowledge and experience you've gained in the trade? Want to earn extra income? Then stop by the Training Center office for an employment application.

San Diego Electrical Training Trust  
4675 Viewridge Avenue  
San Diego, CA 92123-1644  
Phone: (858) 569-6633  
Fax: (858) 569-0624  
[www.positivelyelectric.org](http://www.positivelyelectric.org)

NONPROFIT ORG.  
U.S. POSTAGE PAID  
SAN DIEGO, CA  
PERMIT NO. 2921

# **Spring 2018 Journeyman Class Schedule**