



## **Caltrans Electrical Technician**

**Departmental Open**

**EXAM ID: 7TR72**

**Department: Caltrans**

**Bulletin Release Date: October 6, 2017**

**Cut-Off Date: Continuous (Last business day of the month)**

**Salary: \$3,516.00 to \$4,240.00**

### **INTRODUCTION**

Caltrans is pleased to announce the posting of the **Caltrans Electrical Technician** examination. Employment from this examination may be offered in all Caltrans Districts and Sacramento County.

### **EQUAL EMPLOYMENT OPPORTUNITY**

Caltrans is an equal opportunity employer to all, regardless of age, ancestry, color, disability (mental and physical), exercising the right to family care and medical leave, gender, gender expression, gender identity, genetic information, marital status, medical condition, military or veteran status, national origin, political affiliation, race, religious creed, sex (includes pregnancy, childbirth, breastfeeding and related medical conditions), and sexual orientation.

### **DRUG FREE STATEMENT**

It is an objective of the State of California to achieve a drug-free work place. All applicants will be expected to behave in accordance with this objective, as the use of illegal drugs is inconsistent with the law of the State, the rules governing civil service, and the special trust placed in public servants.

## WHO SHOULD APPLY?

Candidates who meet the minimum qualifications as stated below may apply for this examination.

Once you have list eligibility, you may not reapply for twelve (12) months from your eligibility date. Candidates that are unsuccessful in the examination must wait six (6) months from the testing date before reapplying to take the examination.

## FILING INSTRUCTIONS

Candidates are required to submit: 1) [Standard State Application](#) (STD.678) and 2) [Training and Experience Evaluation](#).

Applications (STD 678) must be received or postmarked no later than the cut-off date. Dates printed on Mobile Bar Codes, such as the Quick Response (QR) Codes available at the USPS, are not considered Postmark dates for the purpose of determining timely filing of an application. Faxed or E-mailed applications will NOT be accepted. THE EXAMINATION TITLE MUST BE INDICATED ON THE APPLICATION.

### **\*FILE BY MAIL:**

Caltrans  
Examination Services (MS 86)  
P.O. Box 168036  
Sacramento, CA 95816-8036

### **\*SUBMIT IN PERSON:**

Caltrans  
Examination Services (MS 86)  
1727 30<sup>th</sup> Street, 1<sup>st</sup> Floor  
Sacramento, CA 95816

**\*Candidates are responsible for obtaining proof of mailing or submission of their application to Examination Services.**

## POSITION STATEMENT

This is the learner and first working level of the series. In the field and on toll bridges under supervision, incumbents assist in the installation, construction and repair of less complex electrical and electronic devices on facilities.

## ELIGIBLE LIST INFORMATION

A Departmental Open statewide eligible list will be established for Caltrans in all Caltrans Districts and Sacramento County. The names of successful competitors will be merged onto the list in order of final scores, regardless of date. Competitor's eligibility will expire 24 months after it is established unless the needs of the service and conditions of the list warrant a change in this period.

## REQUIREMENTS FOR ADMITTANCE TO THE EXAMINATION

All applicants must meet the education and/or experience requirements for this examination by the cut-off date. Your signature on the application indicates that you read, understand, and possess the minimum qualifications required, and that the information provided is true and complete to the best of your knowledge.

Click on the link below to review the California State Personnel Board class specification which contain the requirements for admittance to the exam:

<http://calhr.ca.gov/state-hr-professionals/pages/6939.aspx>

All applications must include: "to" and "from" dates (month/day/year), time base, civil service or private sector titles, the duties performed, and an original signature. Applications received without this information will be rejected.

**NOTE:** Qualifying experience may be combined on a proportionate basis if the requirements stated below include more than one pattern and are distinguished as "Either I," "or II," "or III," etc. For example, candidates possessing qualifying experience amounting to 50% of the required time of Pattern I, and additional experience amounting to 50% of the required time of Pattern II, may be admitted to an examination as meeting 100% of the overall experience requirements.

## MINIMUM QUALIFICATIONS

Possession of a valid Class C driver license. (Applicants who do not possess this license will be admitted to the examination but must secure the license prior to appointment.)

### Either I

An Associate or Certificate of Arts Degree in Electrical or Electronic Technology.

### Or II

Graduation from an electrical or electronic trade school approved by the California Department of Education (or similar agency for out-of-State schools, including military electrical or electronic trade schools). **and**

One year of experience in the installation, construction, maintenance and repair of electrical equipment and electronic control devices.

(In regard to the education requirements of the above patterns, students who are within six months of graduation will be admitted to the examination, but must present evidence of graduation prior to appointment.)

## EXAMINATION INFORMATION

This examination will consist of a Training & Experience Evaluation weighted 100%. In order to obtain a position on the eligible list, a minimum score of 70% must be attained.

Click [HERE](#) to access the Training and Experience Evaluation.

## KNOWLEDGE AND ABILITIES

### Knowledge of:

1. Theory of electricity and electronics
2. Basic terminology, principles, methods, materials, tools and equipment used in the installation, maintenance and repair of electrical and electronic equipment, including solid-state circuits and transistors
3. Safety precautions while working with electricity, including the National Electric Code, the Electrical Orders of the Division of Industrial Safety, CAL/OSHA safety and health regulations, and Caltrans Maintenance Manual Ch.8
4. Proper Personal Protective Equipment (PPE) to safely complete work assignments
5. Operation and care of a wide range of vehicles and equipment used in electrical work (e.g., compressor, generators, personnel hoist, crane truck)
6. Microsoft programs/word processing programs including spreadsheets, outlook, etc.
7. Maintenance and installation of pump plants, park and rides, and rest areas
8. Electrical code books and the Caltrans Maintenance Manual to ensure proper maintenance and installation of traffic signals
9. Maintenance and installation of stationary bridge systems and movable span bridge systems
10. Maintenance and installation of highway information systems and highway lighting systems
11. Common forms and documents (e.g., preventative maintenance forms, work order forms, work permits, hot work permits, confined work permits) used in the installation, maintenance, alteration and repair of electrical systems and components
12. Materials, tools, and equipment (e.g., cable reels, stripping tools, voltage or current meters, wire or cable cutters) used in the installation, maintenance, and repair of electrical systems and components to accomplish work assignments

### Ability to:

1. Communicate at a level required for successful job performance
2. Follow directions
3. Listen and be aware of work environment activities to support a safe and hazard free working environment
4. Work with hand tools

5. Read electrical schematic drawings and construction blueprints
6. Analyze situations and adopt effective courses of action
7. Generate written work reports (punch lists)
8. Estimate parts and materials
9. Perform simple repair of less complex electrical and electronic devices and facilities
10. Perform preventative electrical and electronic maintenance tests
11. Read and interpret Caltrans Standard Plans and Specifications, schematics, and manufacturer requirements to ensure proper installation of Caltrans assets
12. Perform simple installation construction of less complex electronic devices
13. Perform less complex testing of electrical devices and facilities
14. Order electrical parts and materials used in maintenance and installation of electrical and electronic devices and facilities
15. Take inventory of parts and materials in supply
16. Stock parts and materials used in the maintenance and installation of electrical and electronic devices and facilities
17. Maintain and repair of equipment utilizing Maintenance Manuals and reference materials
18. Care for hand and power tools and other equipment to ensure safe operation for the electrician and proper operations

#### **SPECIAL PERSONAL CHARACTERISTIC**

1. Visual and color acuity adequate to successfully perform the essential functions of the job
2. Willingness to work at odd hours and to be available for day or night calls as needed
3. Willingness to stay abreast of current technological changes in the fields of electricity and electronics
4. Willingness to work up to 550 feet above pavement or water and in the midst of traffic
5. Ability to withstand working under adverse (e.g., cold, wet, windy) weather conditions

#### **ADDITIONAL DESIRABLE QUALIFICATIONS**

Possession of a valid and unrestricted Class B or Class A driver license.

#### **VETERANS' PREFERENCE**

Veterans' Preference will be applied to those competitors who are successful in this examination and who qualify for, and have requested, Veterans' Preference through the California Department of Human Resources. Veterans who have achieved permanent civil service status are not eligible to receive Veterans' Preference.

## CAREER CREDITS

Career Credits will not be added to the final score of this examination.

## CONTACT INFORMATION

For more information regarding this examination, please contact the examination analyst at (916) 227-7397.

## GENERAL INFORMATION

**For an examination without a written feature**, it is the candidate's responsibility to contact **the testing department** three weeks after the cut-off date if he/she has not received his/her notice.

**Applications are available** at <https://jobs.ca.gov/pdf/std678.pdf>, California Department of Human Resources (CalHR) offices, and local offices of the Employment Development Department.

**If you meet the requirements** stated on this bulletin, you may take this examination, which is competitive. Possession of the entrance requirement does not assure a place on the eligible list. Your performance in the examination will be compared with the performance of the others who take this test, and all candidates who pass will be ranked according to their scores.

**Caltrans** reserves the right to revise the examination plan to better meet the needs of the service, if the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules and all competitors will be notified.

**General Qualifications:** Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment, and the ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties of the class. A medical examination may be required. In open examinations, investigation may be made of employment records and personal history and fingerprinting may be required.

**Eligible Lists:** Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) sub-divisional promotional, 2) departmental promotional, 3) multi-departmental promotional, 4) service-wide promotional, 5) departmental open, 6) open. When there are two lists of the same kind, the older must be used first. Eligible lists will expire in one to four years unless otherwise stated on the bulletin.

**Veterans' Preference:** Pursuant to Assembly Bill 372, Veterans' Preference will be awarded as follows, starting January 1, 2014:

1. Any veteran, widow or widower of a veteran, or spouse of a 100 percent disabled veteran, who achieves a passing score in an open examination, shall be ranked in the top rank of the resulting eligibility list.
2. Any veteran who has been dishonorably discharged or released is not eligible for Veterans' Preference.
3. Veterans' Preference is not granted once a person achieves permanent civil service status (Permanent State civil service status means the status of an employee who is lawfully retained in his/her position after completion of the applicable probationary period. This includes permanent intermittent, part-time, and full-time appointments. In addition, individuals who at any time achieved permanent State civil service status and subsequently resigned or were dismissed from State civil service are not eligible to receive Veterans' Preference).

Veteran status is verified by the California Department of Human Resources (CalHR). Directions to apply for Veterans' Preference are on the Veterans' Preference Application (CalHR Form 1093) which is available at <https://jobs.ca.gov/CalHRPublic/Landing/Jobs/VeteransInformation.aspx>, CalHR, and the Department of Veterans Affairs.

**TTY** is Telecommunications Device for the Deaf and is reachable only from phones equipped with a TTY Device.

*For individuals with disabilities, this document may be available upon request in alternate formats. To obtain an alternate format, please call or write to Caltrans, Office of Examinations and Recruitment Services, P.O. Box 168036, MS 86, Sacramento, CA 95816. Voice (916) 227-7858 California Relay Service: Voice 1-800-735-2922 or TTY 1-800-734-2929.*