



Electrical Engineering Technician I

Departmental Open

Exam Code: 7TR93

Department: Caltrans

Bulletin Release Date: 10/13/2017

Final Filing Date: 11/03/2017

Salary: \$3,546.00 to \$4,439.00

INTRODUCTION

Caltrans is pleased to announce the posting of the **Electrical Engineering Technician I** 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 on this announcement may apply for this examination.

FILING INSTRUCTIONS

Candidates are required to submit: 1) [Standard State Application](#) (STD678) and 2) [Training and Experience Evaluation](#)

Applications ([STD 678](#)) must be received or postmarked no later than the final filing 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 30th Street, 1st 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 entry and first working level of the series. Under the supervision of an engineer, incumbents prepare complete design and contract drawings and check shop drawings and construction submittals for electrical and electronic work; design simple electrical and electronic systems to previously established standards; prepare basic plans, specifications and quantity and cost estimates on a wide variety of electrical and electronic work such as power and light distribution systems, building, transit station, bridge and tunnel electrical systems, highway lighting and traffic signal systems, electrical systems for motors, fans, pumps and turbines and communication, audio-visual and instrumentation systems; prepare electrical and electronic system layouts and detail drawings of average difficulty; use state-of-the-art technology, i.e., Computer-Aided Drafting/Design (CADD), personal computers, stand-alone interactive systems and automatic lettering devices; incorporate electrical and electronic details into general plans and occasionally will work on drawings and designs other than electrical and electronic; inspect simple manufacturing and installations of electrical and electronic materials and equipment; make simple engineering calculations; report the status of basic electrical and electronic engineering work and completed results.

ELIGIBLE LIST INFORMATION

A Departmental Open eligible list will be established for Caltrans in all Districts and Sacramento County. The list will be abolished 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 final filing 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.

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 who possess 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.

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/3629.aspx>

MINIMUM QUALIFICATIONS

Education: Completion of a two-year terminal curriculum in electrical or electronic technology at a community college, or completion of the sophomore year (at least 60 semester units or equivalent quarter units) of a professional electrical or electronic engineering college or university curriculum. [Candidates may substitute electrical or electronic drafting experience for the education on the basis that one year of experience is equivalent to one year (at least 30 semester units or equivalent quarter units) of education.] **and**

EITHER I

Experience: Two years of experience as a Drafting Services Aid, Range B, in the California state service.

OR II

Experience: Three years of drafting experience in an engineering office (one year of which may be specification writing only), two years of which must have been electrical or electronic drafting and design experience equivalent in responsibility to a Drafting Services Aid, Range B, in the California state service.

EXAMINATION INFORMATION

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

The Training and Experience Evaluation is attached [HERE](#) and MUST be included with the [STD 678](#) Application by the Final Filing Date, as indicated in this bulletin.

KNOWLEDGE AND ABILITIES

Knowledge of:

1. Design of electrical, electronic and associated systems
2. Electrical and electronic material, components, installation, and construction methods
3. Drafting symbols and control and instrumentation devices
4. State-of-the-art technology, i.e., Computer-Aided Drafting/Design (CADD), personal computers, stand-alone interactive systems, and various technical aids
5. Highway lighting and traffic signal systems
6. Electrical control schematic and wiring diagrams
7. Electrical and electronic theory and practice
8. Caltrans' safety and health policies and procedures
9. Basic safety practices contained in the California Code of Regulations, Title 8 Industrial Relations, Safety Orders, and the General Industry Safety Orders regarding personal protective equipment

Ability to:

1. Follow directions
2. Interpret all drawings, plans, and specifications encountered in the work
3. Use state-of-the-art technology, i.e., Computer-Aided Drafting/Design (CADD), personal computers, and stand-alone interactive systems

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) 227-7855.

GENERAL INFORMATION

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.

Candidates needing special testing arrangements due to a disability must mark the appropriate box on the application and/or contact the testing department.

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.