

ELECTRICAL ENGINEERING TECHNICIAN I

Exam Code: 90EAA

Department: California Governor's Office of Emergency Services Exam Type: Departmental, Open Final Filing Date: Continuous

CLASSIFICATION DETAILS

Electrical Engineering Technician I - \$4,214.00 - \$5,275.00 per month

View the Electrical Engineering Technician I classification specification

APPLICATION INSTRUCTIONS

Final Filing Date: Continuous

Who Should Apply:

Applicants who meet the minimum qualifications as stated on this bulletin may apply for and take this examination.

Please read this bulletin in its entirety before taking the examination. Once you have taken this examination, you may not retake it for **nine (9)** months.

How To Apply: The link to connect to the online multiple-choice examination is located on this bulletin in the "Taking the Examination" section. You will be required to upload an electronic copy of your Application (STD. 678) at the beginning of the online examination process.

Application Requirements:

All Standard State Applications (STD 678) must include:

- The examination title and/or exam code on the application
- "To" and "from" dates (month/day/year)
- Hours per week you worked
- Civil service or private sector titles
- Duties performed (Do not list see attached resume)
- If using education to qualify please provide a copy of your transcripts
- Resumes do not replace a completed application (STD 678)

Applications received without this information may be rejected.

NOTE: Candidates unable to provide a degree or unofficial transcripts before the cutoff date may be admitted to the examination process. However, candidates will be required to submit official transcripts upon appointment to a position.

Applications received without an original signature will be admitted to the exam; however, an original signature must be obtained prior to appointment.

Applications will be reviewed to ensure the minimum requirements for participation in this examination are met. Possession of the minimum requirements does not assure a place on the eligible list.

Required Exam Documents:

- Completed Standard State Application (STD 678) package
- Proof of Education (if applicable to meeting the Minimum Qualifications)

Note: If you do not include all the required documents, you will not be considered for this exam.

Cut-Off Dates and Timely Filing:

Examinations will be processed quarterly (or as the needs of the department warrant). Examination cut-off dates are listed below.

February 20, 2024 May 21, 2024 August 20, 2024 November 19, 2024

Special Testing Arrangements:

If you require assistance or alternative testing arrangements due to a disability, please contact the testing department listed in the Contact Information section of this bulletin. Please complete <u>Accommodation Request Form STD 679</u>

MINIMUM QUALIFICATIONS

All applicants must meet the education and/or experience requirements as stated on this exam bulletin to be accepted into the examination. Part-time or full-time jobs, regardless of whether paid or volunteer positions, will count toward experience.

Electrical Engineering Technician I

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.

POSITION DESCRIPTION

Electrical Engineering Technician I

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, audiovisual 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.

EXAMINATION SCOPE

This examination consists of the following components:

Training and Experience Evaluation - Weighted 100% of the final score.

The examination consists solely of a **Training and Experience Evaluation**. To obtain a position on the eligible list, a minimum score of 70% must be achieved.

Applicants will receive their score by mail.

The training and experience evaluations are designed to elicit specific information regarding each candidate's education, training, and experience relative to the testing classification. Responses to the questionnaire will be assessed based on predetermined rating criteria.

In addition to evaluating applicants' relative knowledge, skills, and ability, as demonstrated by quality and breadth of education and/or experience, emphasis in each exam component will be measuring competitively, relative job demands, each applicant's:

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., CADD, personal computers, stand-alone interactive systems and various technical aids;
- 5. Electrical power generation systems;
- 6. Power and lighting distribution systems;
- 7. Power and distribution transformers;
- 8. Movable bridge and tunnel electrical systems;
- 9. Highway lighting and traffic signal systems;
- 10. Electrical systems for motors and their controls;
- 11. Communication systems;
- 12. Audio-visual systems;
- 13. Electrical control schematic and wiring diagrams;
- 14. Drafting presentation and projection methods;
- 15. Electrical and electronic theory and practice;
- 16. Engineering mathematics;
- 17. The department's safety and health policies and procedures;
- 18. 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; prepare design and contract drawings for electrical and electronic work from existing drawings and from design notes and sketches;
- 2. Interpret all drawings, plans and specifications of any kind encountered in the work and incorporate electrical, electronic and associated drawings, plans and specifications into general design and contract documents;
- 3. Prepare as-built plans; use state-of-the-art technology, i.e., CADD, personal computers, stand-alone interactive systems and automatic lettering devices;
- 4. Prepare neat and accurate drafting and freehand and machine lettering;
- 5. Report the status of work and the completed results.
- 6. Prepare basic, or assist in preparation of complex plans, specifications and quantity and cost estimates of electrical and electronic work;
- 7. Do electrical and electronic design and layout work of average difficulty and electrical and electronic detail drafting of the most complex nature.

ELIGIBLE LIST INFORMATION

A departmental, open eligible list for the **Electrical Engineering Technician I** classification will be established for the California Governor's Office of Emergency Services.

The names of **successful** competitors will be merged onto the eligible list in order of final score regardless of exam date. Eligibility expires **Twenty-four (24) months** after it is established. Applicants must then retake the examination to reestablish eligibility.

Veterans' Preference will be granted for this examination. In accordance with Government Codes 18973.1 and 18973.5, whenever any veteran, or widow or widower of a veteran achieves a passing score on an open examination, he or she shall be ranked in the top rank of the resulting eligible list.

Veterans' status is verified by the California Department of Human Resources (CalHR). Information on this program and <u>the Veterans' Preference Application</u> (Std. form 1093) is available online. Additional information on veteran benefits is available at the Department of Veterans Affairs.

Career Credits **will not** be added to the final score of competitors who are successful in this examination.

PREPARING FOR THE EXAMINATION

Here is a list of suggested resources to have available prior to taking the exam.

Employment History: Employment dates, job titles, organization names and addresses, names of supervisors or persons who can verify your job responsibilities, and phone numbers of persons listed above.

Education: School names and addresses, degrees earned, dates attended, courses taken (verifiable on a transcript), persons or office who can verify education, and phone numbers of persons or offices listed above.

Training: Class titles, certifications received, names of persons who can verify your training, and phone numbers of persons listed above.

TAKING THE EXAMINATION

When you select the link below, you will be directed to the Electrical Engineer Technician I online examination. Examination scores will be processed quarterly (or as the needs of the department warrant) and results will be mailed to the address provided during the application process.

Please allow approximately 60 minutes to complete this examination. There is no way to pause, stop or reset the exam once you start. Please ensure you allow plenty of time to take the online examination, it is recommended you do not take the examination until you are able to do so.

CLICK HERE TO TAKE THE ELECTIRCAL ENGINEER TECHNICIAN I EXAM

TESTING DEPARTMENT

California Governor's Office of Emergency Services

CONTACT INFORMATION

If you have any questions concerning this examination bulletin, including provisions of reasonable accommodation for this testing process, please contact:

California Governor's Office of Emergency Services 3650 Schriever Avenue Sacramento, CA 95655 Phone: (916) 845-8321 <u>Examinations@caloes.ca.gov</u>

California Relay Service: 1-800-735-2929 (TTY), 1-800-735-2922 (Voice)

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

EQUAL OPPORTUNITY EMPLOYER

The State of California is an equal opportunity employer to all, regardless of age, ancestry, color, disability (mental and physical), exercising the right of 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 State workplace. Any applicant for State employment will be expected to behave in accordance with this objective, because 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.

GENERAL INFORMATION

Examination and/or Employment Application (STD 678) forms are available at the California Department of Human Resources, local offices of the Employment Development Department, and through your <u>CalCareer Account.</u>

If you meet the requirements stated on this examination bulletin, you may take this examination, which is competitive. Possession of the entrance requirements does not assure a place on the eligible list. Your performance in the examination described in this bulletin will be rated against a predetermined job-related rating, and all applicants who pass will be ranked according to their score.

The California Governor's Office of Emergency Services 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 applicants will be notified.

General Qualifications: Applicants must possess essential personal qualifications including integrity, initiative, dependability, good judgement, 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) servicewide 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.

High School Equivalence: Equivalence to completion of the 12th grade may be demonstrated in any one of the following ways: 1) passing the General Education Development (GED) Test; 2) completion of 12 semester units of college-level work; 3) certification form the State Department of Education, a local school board, or high school authorities that the competitor is considered to have education equivalent to graduation from high school; or 4) for clerical and accounting classes, substitution of business college work in place of high school on a year-for-year basis.