# **ELECTRICAL ENGINEER**

Class Code: 7539

Open Date: 08-26-16

(Exam Open to Current City Employees)

# ANNUAL SALARY

\$116,740 to \$145,032; \$119,370 to \$148,310; \$122,001 to \$151,567; and \$124,382 to \$154,532

#### NOTES:

- 1. Candidates from the eligible list are normally appointed to vacancies in the lower pay grade positions.
- For information regarding reciprocity between the City of Los Angeles departments and LADWP, go to http://per.lacity.org/Reciprocity\_CityDepts\_and\_DWP.pdf.
- 3. The current salary range is subject to change. You may confirm the starting salary with the hiring department before accepting a job offer.

# **DUTIES**

An Electrical Engineer does responsible and complex engineering work in preparing, organizing and directing the work of employees engaged in the preparation of plans, designs, specifications, engineering economic cost and operational analysis studies, estimates, power supply contracts and reports; directs activities associated with the planning, construction, testing, maintenance, and operation of electric facilities or other Department facilities; applies sound supervisory principles and techniques in building and maintaining an effective work force; and fulfills equal employment opportunity responsibilities.

#### REQUIREMENTS/MINIMUM QUALIFICATIONS

- Two years of full-time paid professional engineering experience in a position at least at the level of Electrical Engineering Associate II, Class Code 7525, <u>and</u>
- 2. Registration as a Professional Engineer in Electrical Engineering with the State of California Board for Professional Engineers, Land Surveyors, and Geologists.

## PROCESS NOTES

- 1. To be at the level of an Electrical Engineering Associate II, an Engineer-In-Training (EIT) certificate is required. Therefore, qualifying experience is gained in positions after obtaining an EIT certificate.
- 2. Applicants who lack six months or less of the required experience may file for this examination. However, they cannot be appointed until the full experience requirement is met.
- Some positions may require a valid California driver's license. Candidates may not be eligible for appointment to these positions if their record within the last 36 months reflects three or more moving violations and/or at-fault accidents, or a conviction of a major moving violation (such as DUI).
- 4. Registration as a Professional Engineer in Electrical Engineering with the State of California Board for Professional Engineers, Land Surveyors, and Geologists is required at time of filing. Applicants must list their Professional Engineer registration number and expiration date in the Supplemental Questions section of the application.

#### WHERE TO APPLY

Applications will only be accepted on-line. When you are viewing the on-line job bulletin of your choice, simply scroll to the top of the page and select the "Apply" icon. On-line job bulletins are also available at <a href="https://www.governmentjobs.com/careers/lacity/promotionaljobs">https://www.governmentjobs.com/careers/lacity/promotionaljobs</a> for Promotional Examinations.

#### NOTE:

Applicants are urged to apply early to ensure you have time to resolve any technical issues you may encounter.

### APPLICATION DEADLINE

Applications must be received on-line by THURSDAY, SEPTEMBER 8, 2016.

#### SELECTION PROCESS

After meeting minimum qualifications, candidates will be scheduled for the following:

Examination Weights:	Written Test	Qualifying
	Essay	Advisory
	Interview	100%

The examination for Electrical Engineer will consist of a qualifying written test, an advisory essay and an interview. In the qualifying written test, which will consist entirely of multiple choice questions, candidates may be examined for knowledge of: principles and practices of electrical engineering as applied to the research, planning, design, construction, maintenance, project management including cost and schedule control and contract administration, conductors and insulating materials, power system grounding, AC & DC circuit theory and analysis, basic theory of power and VAR flows; safety, testing, and operation of electrical facilities; power system facilities design, operation, and maintenance; safety rules, codes, regulations, principles and practices including CAL/OSHA; governmental regulations and environmental requirements affecting the Power System; transformers, protective relays, circuit breakers, and electrical apparatus, rotating electrical machines, rotating electrical machines, power system planning and analysis, power flow stability, short circuits studies, economic assessments, facility automation, instruments, and controls, and renewable energy technologies; pertinent City and Personnel Department rules, policies and procedures, including Equal Employment Opportunity policies and Memoranda of Understanding (MOU) as they relate to subordinate personnel; supervisory principles and practices, including directing, assigning, motivating, training, counseling, disciplining, commending and evaluation of subordinate personnel; and the ability to analyze cost estimating methods and procedures sufficient to budget for proposed projects; interpret and understand detailed engineering design drawings, including schematic, wiring diagrams, and equipment layout drawings; and other necessary knowledge, skills and abilities.

Candidates will also be required to prepare some written material in response to a problem related to the duties of an Electrical Engineer. This essay material will not be scored separately, but will be presented to the interview panel for discussion with the candidate and for consideration in the overall evaluation of the candidate. Candidates must complete the advisory essay, which will be administered at the time of the written test. Those who do not pass the multiple-choice test, or do not complete the advisory essay, will not be invited to the interview and will be considered to have failed the entire examination.

Candidates will be notified later by e-mail of the time and location of the qualifying written test and advisory essay, which will be held in a single half-day session on **SATURDAY**, **OCTOBER 29**, **2016** in Los Angeles.

Candidates must achieve a passing score on the qualifying written test in order to be invited to the interview.

#### **Passing Score for Qualifying Written Test**

The passing score for the qualifying written test will be determined by Personnel Department staff after the qualifying written test is administered. Consideration will be given to the number of candidates taking the test and the existing and anticipated number of vacancies, such that there are a sufficient number of eligibles on the list to satisfy current and future vacancies for the next two years. Therefore, the passing score for the qualifying multiple-choice written test may be set either above or below 70%.

The examination score will be based entirely on the interview. In the interview, emphasis may be placed on the candidate's qualifications as they demonstrate the knowledge of: principles and practices of electrical engineering as applied to the research, planning, design, construction, maintenance, safety, testing, and operation of electrical facilities; power system facilities design, operation, and maintenance; power system planning and analysis; renewable energy technologies; safety rules, codes, regulations, principles and practices including CAL/OSHA; governmental regulations and environmental requirements affecting the Power System; project management including cost and schedule control and contract administration; pertinent City and Personnel Department rules, policies and procedures, including Equal Employment Opportunity policies and Memoranda of Understanding (MOUs) as they relate to subordinate personnel; supervisory principles and practices, including directing, assigning, motivating, training, counseling, disciplining, commending and evaluation of subordinate personnel; and the ability to analyze cost estimating methods and procedures sufficient to budget for proposed projects; direct and coordinate tests of department facilities; communicate orally for the purpose of explaining various technical and non-technical concepts; write technical and non-technical reports; provide technical support and coordinate the work of engineering, construction, operations, and maintenance personnel; deal tactfully and effectively with others; and other necessary knowledge, skills and abilities.

Candidates will be notified later by e-mail of the date, time, and location of the interview, which will be held in Los Angeles.

#### NOTES:

- 1. This examination is based on a validation study, and as provided by Civil Service Commission Rule 4.20, the written test will not be subject to candidate inspection.
- 2. As a covered entity under the Fair Employment and Housing Act and Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and upon request, will provide reasonable accommodations to ensure equal access to its programs, services, and activities. To request a disability accommodation, please complete the Disability Accommodation Form within 14 calendar days of the submittal of the City application. The Disability Accommodation Form can be obtained at <a href="http://per.lacity.org/exams/verify\_disability.pdf">http://per.lacity.org/exams/verify\_disability.pdf</a>.
- 3. Applications are accepted subject to review to ensure that minimum qualifications are met. Candidates may be disqualified at any time if it is determined that they do not possess the minimum qualifications stated on this bulletin.
- 4. A final average score of 70% in the interview portion of the examination is required to be placed on the eligible list.
- 5. Seniority credit at the rate of 0.25 of a point for each year of continuous service will be added to the weighted test score of each candidate.
- 6. You must have received a regular appointment to a City position or be on a reserve list to file on a promotional basis.

# THIS EXAMINATION IS TO BE GIVEN ONLY ON AN INTERDEPARTMENTAL PROMOTIONAL BASIS

The City of Los Angeles does not discriminate on the basis of race, religion, national origin, sex, age, marital status, sexual orientation, gender identity, gender expression, disability, creed, color, ancestry, medical condition (cancer), or Acquired Immune Deficiency Syndrome.