

**CITY OF LOS ANGELES  
CIVIL SERVICE COMMISSION**



**CLASS SPECIFICATION**  
POSTED JUNE 1999

5-15-98            COMMUNICATIONS ENGINEERING ASSOCIATE, 7607

**Summary of Duties:** A Communications Engineering Associate performs professional communications engineering work in the preparation of plans, designs, specifications, estimates, studies, reports, and cost and service analyses for City communications systems; gives technical direction in the construction, maintenance, and operation of communications systems and equipment; and does related work.

**Distinguishing Features:** A Communications Engineering Associate I is the normal entry level to the class. Employees at this level usually have little, if any, experience or special training. They initially perform the less complex professional engineering work under close supervision while learning and assisting in a variety of routine duties. As employees become more experienced, they may work independently and may be responsible for one or more large projects. Positions at this level are three-year temporary training positions under Civil Service Rule 5.30. Employees with two years of full-time paid City experience as a Communications Engineering Associate I and an Engineer-in-Training (EIT) Certificate will automatically promote to Communications Engineering Associate II.

Employees at the Communications Engineering Associate II level perform journey level engineering work requiring a working knowledge of engineering skills. Individuals at this level usually work independently, receive instructions in general terms and may be responsible for one or more major City projects having wide impact and significant costs. Employees may serve as a lead over a small engineering group of lower level employees.

Employees at the Communications Engineering Associate III level may supervise, or serve as a lead over a small group of employees, or act as a project manager or project engineer involved in work that is technically complex and requires considerable experience, skill and engineering knowledge. Two years of full-time paid, professional experience at the level of Communications

Engineering Associate II and registration as a professional engineer with the California State Board of Registration for Professional Engineers is required for advancement to this level.

Employees at the Communications Engineering Associate IV level are non-supervisory technical experts who shall maintain the skills and expertise necessary to remain at the higher paygrade level. They may conduct extensive research into new technical developments and evaluate their suitability for City use, may prepare standards for technical design, may develop and conduct training for other employees about new procedures and techniques, or may act as an internal consultant to other employees or very difficult issues. These positions are assigned by department management according to Department's needs. Some positions require registration as a professional engineer with the California State Board of Registration for Professional Engineers, as determined by department management.

**Examples of Duties:** A Communications Engineering Associate:

- prepares or assists in the preparation of plans for new communications installations and engineering studies comparing cost and operation of alternate methods of providing new communication services;
- conducts field surveys for each existing facility to determine system, system equipment and requirements for systems infrastructure;
- prepares studies of communications operational and maintenance procedures and recommends solutions;
- investigates communication services, such as telephone, teletype, data transmission, video transmission, mobile radio, microwave, intercom, telemeter, fire alarm, intrusion alarm, signal, control, and cable and open wire systems to determine proper design and ways of improving City services;
- determines conduit and space requirements for communications cable and equipment to be located in City buildings and streets;
- investigates complaints and initiates corrective action regarding communications service or equipment usage;
- investigates requests for new or improved communications service, determines propriety of requests, and recommends initiation of the appropriate service;
- prepares installation designs;
- orders and directs the installation of leased communication systems;
- acts as section head in the absence of the Communications Engineer.

May occasionally be assigned other duties for training purposes or to meet technological changes or unexpected emergencies.

**Qualifications:** Incumbents must have the following knowledges and abilities:

**A good knowledge of:**

- the principles and practices of communications engineering and drafting;
- the sources of engineering information such as codes and test standards.

**The general knowledge of:**

- principles and practices of communications engineering pertinent to the design, operations, and maintenance of such communications services as telephone, teletype, data transmission, video transmission, mobile radio, microwave, intercom, telemeter, intrusion alarm, fire alarm, signal, control, and cable and open wire systems;
- the City's communications systems, equipment, and facilities as needed to analyze and determine design, space, equipment, service, and usage requirements;
- the principles, practices, and techniques involved in preparing cost and operational comparisons and making recommendations regarding methods of providing new or improving existing communication services;
- the principles of mathematics, physics, chemistry, metallurgy, hydraulics, thermodynamics, and mechanics normally included in the field of communications or electrical engineering;
- the sources of communications engineering information and new developments in the field.

**The ability to:**

- determine from reports, tests, and investigations the causes of problems in operational procedures, communication services, or equipment usage and to prescribe proper remedial action;
- write clear and concise reports;
- read and interpret building plans and communication equipment specifications;
- deal tactfully and effectively with employees and the public.

Persons with disabilities may be able to perform the essential duties of this class with reasonable accommodation. Reasonable accommodation will be evaluated on an individual basis and depends in part, on the specific requirements for the job, the limitations related to the disability and the ability of the hiring department to reasonably accommodate the limitations.

**Minimum Requirements:** Graduation from a school of engineering in a recognized four-year college or university with a degree in Engineering, which includes at least 24 semester units or 36 quarter units of Communications or Electrical Engineering courses; or possession of a valid Engineer-in-Training certificate recognized by the California State Board of Registration for Professional Engineers.

**License:** A valid California driver's license may be required.

**As provided in Civil Service Commission Rule 2.5 and Section 4.55 of the Administrative Code, this specification is descriptive, explanatory and not restrictive. It is not intended to declare what all of the duties, responsibilities, and required qualifications of any position shall be.**