

OFFICE ENGINEERING TECHNICIAN, 7212

Summary of Duties : Perform routine, moderately difficult, or difficult office engineering work of a subprofessional character in making computations, preparing plans, specifications and samples, and compiling or assisting in compiling data required for the preparation of engineering reports, estimates, designs, specifications, schedules plans and the coordination of engineering projects; may supervise such work; and does related work.

Distinguishing Features : Office Engineering Technicians are required to perform general subprofessional office engineering work, under close supervision, where assignments are specific.

Some Office Engineering Technician positions require familiarity with engineering techniques and the ability to make engineering calculations. Employees assigned to these positions usually work without close supervision, however, most of the subprofessional office engineering work is repetitive or follows standard procedures.

Some Office Engineering Technician positions perform the more difficult and responsible subprofessional office engineering work, including the gathering, compiling, and processing of technical engineering data for planning, financing, and coordinating municipal engineering projects, and may supervise employees performing subprofessional engineering work.

Examples of Duties : Drafts and makes minor changes on maps and drawings from field notes and data using common drawing instruments; makes minor mathematical calculations involving the use of trigonometry; does freehand and mechanical lettering; colors maps; checks land areas; does copy drafting and house numbering; indexes, cross-references and files maps, charts, graphs, and similar engineering data; files, makes record searches and maintains engineering records; calculates costs of maintaining public improvement systems; delineates assessment district boundaries; reviews Council calendars and digests, and legal and construction newspapers for items pertaining to assessment project processing; prepares routine petitions, notices and ordinances for assessment proceedings; prepares routine statistical reports.

Assists in compiling data for plans, specifications, cost estimates, computer files and reports; compiles and analyzes data pertaining to the operation and changes to electrical generation, transmission, and distribution equipment and facilities; makes engineering calculations; does drafting, sketches and preliminary work relative to design; compiles statistics; checks field books; makes field investigations; plots tract maps; checks legal property descriptions and meets the public when answering engineering questions; writes

routine reports; checks data used in simple plans, diagrams or maps; does routine quantity take-offs; assists engineers in design and coordinating work; assists in coordinating public improvement assessment project proceedings with other offices; assists in preparing routine reports, notices, ordinances, letters and other documents related to assessment project authorization, public hearings to proceed with the project, or to confirm assessments, award contracts, and finance project costs; calculates the costs of maintaining public improvements; delineates assessment district boundaries; and assists in identifying, computing, and apportioning routine cost of public improvements in relation to benefits received.

Gathers, compiles, and processes technical engineering data and prepares special reports and routine correspondence as requested; assembles, reviews, and verifies information; files and retrieves survey data and dispenses survey data to governmental agencies and the public, prepares project records and status reports; verifies quantity and cost estimates; makes field trips to various design offices to coordinate priorities and resolve project scheduling problems; reviews design schedules; investigates delays, and recommends transfer of projects or personnel to expedite design completion; analyzes and recommends system procedures and control methods; compiles and analyzes data pertaining to the operation of and changes to electrical generation, transmission and distribution equipment and facilities; operates data processing terminal devices; maintains and makes modifications to computer programs; may supervise individuals performing subprofessional engineering work; and may occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

Qualifications: A general knowledge of trigonometry as applied to the computation of distances, angles, areas and traverses; a general knowledge of engineering information; a general knowledge of fundamentals of electricity and mechanics; a general knowledge of principles and instruments used in drafting, sketching and tracing; a general knowledge of electronic computing and processing methods; a general knowledge of English grammar usage; the ability to perform freehand and mechanical lettering; the ability to read and interpret maps, drawings and graphs; the ability to understand and carry out written and oral instructions relating to engineering work; the ability to perform mathematical computations quickly, neatly and accurately; the ability to use drafting instruments, planimeters, and calculating machines efficiently; the ability to prepare and interpret sketches, drawings and legal property descriptions; the ability to communicate and work effectively with professional engineers, supervisors, other employees and the public; the ability to keep records and prepare clear concise reports.

Some positions also require a good knowledge of safety principles and practices; a working knowledge of electrical equipment normally found in a large electric utility system; a working knowledge of logarithmic, trigonometric and curve data tables; a working knowledge

of laws and regulations related to equal employment opportunity and affirmative action; a general knowledge of field survey and construction practices; a general knowledge of civil engineering practices and procedures as applied to sewerage, storm drain and street and highway construction; a general knowledge of memoranda of understanding as they apply to subordinate personnel; a general knowledge of City personnel rules, policies and procedures; the ability to prepare summary and status reports and recommendations in connection with the coordination of engineering design work; and the ability to supervise employees engaged in subprofessional engineering design work.

Completion of a course in trigonometry is required for Office Engineering Technician.

License: A valid California driver's license may be required for some positions in this class.

Physical Requirements: Strength to perform average lifting of less than 5 pounds and occasionally over 15 pounds; arm, hand and finger dexterity involved in handling, fingering and feeling; good speaking and hearing ability; and good eyesight.

Persons with medical limitations may, with reasonable accommodations, be capable of performing the duties of some of the positions in this class. Such determination must be made on an individual basis in light of the person's limitations, the requirements of the position, and the appointing authority's ability to effect reasonable accommodations to the person's limitations.

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 and responsibilities of any individual position shall be.