

## City of San José

**ENGINEERING TRAINEE (PT) (3811)**CLASS PURPOSE

Under immediate supervision, performs a variety of sub-professional engineering work of routine difficulty. Performs related work as required.

TYPICAL DUTIES AND RESULTS (Any one position may not include all the duties listed, nor do the examples cover all the duties which may be performed.)

- Searches title and assessment records, compiles reports, and keeps simple clerical records.
- Measures horizontal and vertical distances with a chain and other devices.
- Holds target for level or transit, relocates old survey markers, makes and drives hubs and stakes, and cuts brush.
- Measures for new house numbers and street sign post locations; keeps notes on measurements and locations.
- Indexes and files field survey notes, maps, and plans; mends tapes and other simple survey equipment.
- Performs simple drafting and tracing under the direction of a professional engineer or skilled engineering draftsman.
- Prepares sketches of concepts; prepares exhibits, maps, and signs as needed for meetings.
- Prepares documents for aviation easements.
- Collects wastewater samples; inspects water screening equipment; inspects sampling devices; maintains reports.

DISTINGUISHING CHARACTERISTICS

This class is an adjunct to a five-class Civil Engineering series. The class is designed for students enrolled in a recognized college or university and majoring in Engineering. Incumbents in this class perform a variety of sub-professional engineering work under the immediate supervision of an Engineer or higher-level Engineering Technician. The work is usually performed on a part-time basis and, occasionally, on a temporary full-time schedule. Work requires an alert individual who may be given increasingly more difficult assignments and be trained for advancement in the engineering field. This class differs from the next higher class of Civil Engineer I in that incumbents of the latter class perform engineering work of greater difficulty under the supervision of a higher-level engineer.

QUALIFICATIONS

Minimum Knowledge, Skills, and Abilities

- Knowledge of mathematics, including algebra, trigonometry, and geometry.
- Knowledge of the elementary principles and terminology of civil engineering.
- Ability to perform routine engineering computation.
- Ability to use drafting instruments.
- Ability to carry out oral and written instructions.
- Ability to prepare clear and concise reports.
- Ability to establish and maintain effective working relationships.
- Ability to communicate effectively orally and in writing.

Competency Knowledge, Skills, and Abilities

- Knowledge of industrial wastewater programs and principles.
- Knowledge of surveying techniques related to the construction of public works projects.
- Ability to conduct and research title searches.
- Ability to assist on a survey crew.
- Ability to perform a variety of increasingly responsible drafting assignments.
- Ability to prepare sketches of concepts; prepare exhibits, maps, and signs.

Education

Successful completion of high school, General Education Development (G.E.D.) Certificate, or California Proficiency Certificate and current enrollment in an accredited college or university with a major in Civil Engineering or a closely related field.

Experience

No minimum requirement.

Acceptable Substitutions

None.