

**CLASS SPECIFICATION**  
**Engineering Technician I**

FLSA Status: Covered  
Union Representation: Professional and Technical Employees (PTE)

**GENERAL PURPOSE**

Under general supervision, performs supportive and technical assignments of standard to moderate difficulty applying scientific and technical knowledge in the areas of engineering, construction and permit processing, including explaining policies and procedures to the public to achieve understanding, cooperation and compliance with codes; performs drafting, computer operation, technical writing, research, map reading, plan review and field inspections; and performs related duties as assigned.

**DISTINGUISHING CHARACTERISTICS**

Engineering Technician I is the entry-level class in the Engineering Technician series. Incumbents perform standard to moderately difficult supportive and technical tasks in engineering, construction and permit processing as assigned. Completed work is reviewed for accuracy and compliance with instructions.

Engineering Technician I is distinguished from Engineering Technician II in that incumbents in the latter class perform more complex and difficult engineering, construction and permit processing support assignments requiring a more thorough understanding of scientific and technical knowledge. Engineering Technicians II are assigned projects of larger scope, are responsible for maintaining various processes and exercise intermediate problem-solving skills. Engineering Technicians I perform more standard to moderately difficult tasks and are more process oriented, typically performing well-defined duties, are assigned discrete portions of a larger project, and exercise basic problem-solving skills.

**ESSENTIAL DUTIES AND RESPONSIBILITIES**

Any one position in this class may not perform all the duties listed below, nor do the listed examples of duties include all similar and related duties that may be assigned to this class.

1. Explains City codes, policies and procedures to the public, contractors, engineers, architects and other public or utility organization employees to improve their understanding of City programs and to ensure adherence to procedures in routine technical matters.
2. Indexes, files, updates, researches and compiles data from various sources.
3. Collects, summarizes and stores programmatic data to improve program effectiveness using computers, source documents, and other records according to established procedures.
4. Through onsite visits, collects field data, verifies conditions, takes measurements, notes developing problems, carries out duties related to specific assignments and reports results to supervisor for evaluation.

5. Provides administrative, logistical and technical support to project and construction management staff by organizing and coordinating records, files and databases; gathers, records and evaluates data; assists with meetings, document preparation and enforcement of standards or specifications.
6. Composes correspondence.
7. Utilizes calculators and computers to perform calculations or enter and extract information to assist engineers in developing plans and specifications for various public works projects.
8. Draws plans, maps and charts and assists in writing specifications for contracts and materials.
9. Prepares reports, including graphics, to describe project or program goals or activities using manual or computer tools.
10. Processes applications for permits, inspections or services and issues work orders and permits.

#### **OTHER DUTIES**

1. Lifts, carries, installs and makes simple adjustments to data collection devices.

#### **MINIMUM QUALIFICATIONS**

##### **Knowledge of:**

1. Basic engineering and/or architectural terminology, practices and procedures.
2. Basic arithmetic, algebra, geometry, trigonometry and statistics related to engineering work.
3. Standard office practices and procedures for maintaining and setting up both manual and electronic files; basic methods and procedures for archiving and retrieving map and drawing information; and data gathering and research techniques.
4. Acceptable construction practices.
5. City geography and street locations.

##### **Ability to:**

1. Understand and follow written and oral instructions; work under general supervision; work simultaneously on multiple tasks.
2. Perform detailed work thoroughly, neatly, accurately and efficiently.
3. Perform basic engineering and mathematical computations; utilize specialized drafting, engineering, surveying or electronic tools, materials and equipment.
4. Establish and maintain effective working relationships with bureau management and staff, contractors and others encountered in the course of work.

5. Learn and interpret codes, rules, regulations, and policies and apply these to a variety of customer requests.
6. Interpret and explain both orally and in writing technical information to the public, specifically City Codes, policies, procedures and regulations.
7. Search and obtain information from such documents as engineering or architectural drawings, regulations, reports, application forms, manuals, property records, plans, specifications and various kinds of maps, graphs and construction plans; gather, record and analyze data to prepare technical reports, documents and recommendations.
8. Learn and operate a variety of computer software programs to record and analyze data, maintain technical files, and prepare maps, plans, records, graphics, documents and reports.
9. Use safety precautions when driving or working at field sites.
10. Draft line drawings, update maps, plot graphs and prepare display materials.
11. Provide direction to support staff.

**Training and Experience:**

A typical way of obtaining the knowledge, skills and abilities outlined above is graduation from high school, trade school or vocational school, or G.E.D. equivalent, supplemented by courses in engineering technology; or an equivalent combination of training and experience. Experience in a public agency is preferred.

**Licenses; Certificates; Special Requirements:**

A valid state driver’s license may be required for certain assignments.

**PHYSICAL AND MENTAL DEMANDS**

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 depend, in part, on the specific requirements for the job, the limitations related to disability and the ability of the hiring bureau to accommodate the limitation.

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**Class History:**

Adopted:	01-01-90	Class created as a result of consolidating the following COPPEEA classes: 3105 Permit Technician I (Adopted 02-20-87) 3106 Permit Technician II (Adopted 02-20-87) 3112 Engineering Aide (Revised 05-21-85) 3113 Senior Engineering Aide (Revised 02-15-83) 3115 Engineering Computer Aide (Adopted 06-15-76)
Revised:	11-01-93	Reformatted specification, changed Permit specialty to Customer Support and added Environmental specialty.

Revised: 04-03-94 Class spec reviewed for supervisory language.  
Revised: 08-15-96 Added Facilities Projects specialty.  
Revised: 08-30-96 Added GIS specialty.  
Revised: 07-01-01 Spec revised as part of the COPPEA Classification and Compensation study.  
Engineering Technician I (6021) class created from the following COPPEA class(es):  
3107 Technician I (Engineering specialty)  
Revised: 08-01-06 Spec history revised to reflect pre-2001 COPPEA Study history. Spec formatting modified.  
Revised: 08-07-06 Revised FLSA status from “Non-exempt” to “Covered.”  
June 2009 - Change Job Class number from 6021 to 30000324, due to system change.  
July 2017 – Updated union name from COPPEA to PTE