

**COMPETENCY MODEL FOR
COMMUNICATIONS ENGINEERING ASSOCIATE
CLASS CODE 7607**

The following competencies have been identified as those that best separate superior from satisfactory job performance in the class of **COMMUNICATIONS ENGINEERING ASSOCIATE** (Numbers refers to the order of competencies in the Competency Bank.)

- 3. Judgment and Decision Making
- 4. Analytical Ability
- 6. Attention to Detail
- 8. Safety Focus
- 11. Initiative
- 12. Conscientiousness
- 20. Job Knowledge
- 26. Electrical Understanding
- 34. Customer Service
- 45. Oral Communications

On the following pages are descriptions of each competency, including a definition, the level of the competency required for the class (*italicized*, **bolded**, and underlined), examples of behavioral indicators, and satisfactory and superior performance levels.

3. JUDGMENT AND DECISION MAKING – Accurately assesses situations, seeks new information if necessary, and applies all available information to reach sound conclusions/formulate effective response.

Level of Competency Required by Job:

Level 1: Training and guidelines needed to respond to immediate situations within very specific function are provided (or supervisor available to assist).

Level 2: General information and guidance to assist in responding to a variety of situations across a range of circumstances are provided.

Level 3: Little guidance available for responding to a wide range of complex situations with far-reaching and/or enduring consequences.

Examples of Behavioral Indicators:

- Effectively responds to atypical situations.
- Asks questions or otherwise obtains additional relevant information to make a decision.
- Formulates a decision and necessary actions based on available facts.
- Correctly infers appropriate response based on information provided and existing policies, personal experience, and/or consultation with others.
- Discusses conclusions/possible responses with others before taking action as necessary.
- Considers impact of decisions on all affected parties.

Performance Levels:

Satisfactory

Correctly assesses routine and unusual situations and reaches appropriate conclusions for actions needed. Obtains additional information and/or consults with others as necessary.

Superior

Evaluates new situations accurately to establish an appropriate response or plan of action. Recognizes the impact on all affected parties, as well as the possible ramifications and/or repercussions of setting a precedent.

4. ANALYTICAL ABILITY – Identifies, obtains, and evaluates relevant information to establish relationships or patterns, cite causes, and

reach logical conclusions.

Level of Competency Required by Job:

Level 1: Recognize similarities/differences in current situation to those previously encountered and is guided accordingly. Apply existing policies correctly. Ask pertinent questions or otherwise seek additional information to formulate appropriate response.

Level 2: Consider multiple, varied factors when evaluating a situation or issue. Seek additional information to provide further insight. Reach conclusions that logically follow from the information obtained.

Level 3: Consider a multitude of diverse factors, their interrelationships, the perspectives of others, alternative courses of action and their likely ramifications when evaluating information to reach a conclusion.

Examples of Behavioral Indicators:

- Obtains the necessary amount of relevant information.
- Recognizes the impact of each type of information on conclusions.
- Evaluates the quality/source of information when considering it.
- States the shortcomings of the information and, therefore, the analysis.

Performance Levels:

Satisfactory

Recognizes available relevant information, seeks additional information to consider, and reaches a conclusion. Provides sound, convincing justification for conclusions, citing relevant data and facts.

Superior

Uses a great deal of existing and obtained information and data to develop and evaluate alternatives and arrive at a final conclusion. Provides compelling arguments in support of conclusions.

6. ATTENTION TO DETAIL – Extremely careful in addressing all aspects of each work assignment in order to produce “completed staff work” and/or avoid any negative outcomes.

Level of Competency Required by Job:

Level 1: Ensure all aspects of work assignment are completed as directed.

Level 2: Verify that each aspect of work assignment is properly completed; make logical inference regarding additional activities that may need to be performed to produce “completed staff work.”

Level 3: Include evaluation of final work/work product in its accomplishment; make adjustments as possible to improve.

Examples of Behavioral Indicators:

- Carefully checks all aspects of work for completion and accuracy before submitting.
- Identifies errors (for example, typo’s, computations, measurements, application of laws/rules/policies) and corrects them prior to submitting.
- Cross-checks work against available resources.
- Sets up a means of checks and balances to ensure work accuracy.
- Considers changes in final work product to ensure usability by recipient.
- Completes all revisions upon request.

Performance Levels:

Satisfactory

Ensures that each task accomplished represents “completed staff work.” No remaining details/ inconsistencies for others to address.

Superior

All aspects of each task completed are verified to be correct. Identifies any foreseeable consequences of work that may need to be addressed and does so.

8. SAFETY FOCUS – Performs work in a way that minimizes risk of injury to self or others.

Level of Competency Required by Job:

Level 1: Maintain awareness of unsafe conditions and actions to avoid injury.

Level 2: Follow safety rules/procedures; avoid known hazards in the work environment.

Level 3: Carefully follow safety rules and procedures and consistently use all necessary safety equipment.

Examples of Behavioral Indicators:

- Wears seat belt.
- Ensures safe physical work environment by taking actions such as eliminating unstable stacks of materials, closing drawers so filing cabinets will not tip over, and keeping pathways clear of tripping hazards.
- Reviews safety procedures before beginning each job with known hazards.
- Follows safety procedures while performing work even when it takes more time.
- Uses safety equipment such as goggles, gloves, and earplugs as required or warranted.
- Frequently checks safety equipment for proper condition and operation.

Performance Levels:

Satisfactory

Maintains awareness of personal safety to avoid injury or property damage during all work activities.

Superior

“Safety first.” Places avoidance of injury or property damage above all other job requirements. Mentions the need to follow safe work practices to co-workers. Actively seeks ways to avoid injury.

11. INITIATIVE – Generates activity that facilitates accomplishment of work.

Level of Competency Required by Job:

Level 1: Offer to help co-workers and/or recognize things to do that facilitate work group accomplishment.

Level 2: Identify new tasks/projects to be undertaken and assist others with accomplishment of their work.

Level 3: Determine additional work necessary to improve the function and productivity of the organization or its services to citizens or other customers.

Examples of Behavioral Indicators:

- Makes suggestions for improvement in work quality or quantity.
- Finds work to do when own work is slow rather than allow diminished personal productivity.
- Expands scope of work/responsibility in appropriate directions.
- Anticipates upcoming events in order to prepare for them.

Performance Levels:

Satisfactory

Generates goal directed activity rather than waiting to be told what to do. Anticipates what is likely to occur in order to be able to prepare; recognizes that preparation for (and clean-up after) a job is part of doing the job.

Superior

Actively pursues additional tasks/responsibilities that will facilitate effectiveness. Makes extensive preparations for upcoming events or expected changes.

12. CONSCIENTIOUSNESS – Dependable, reliable, diligent, and attends to all aspects of assignments (the “details”).

Level of Competency Required by Job:

Level 1: Remain on-task and make every reasonable effort to complete work in time allotted. Note discrepancies and takes action or informs appropriate person when “things don’t seem right” in information or data.

Level 2: Note when own work logically relates to the work of others and coordinate with them and when additional tasks must be performed to complete an assignment and perform/assign them. Recognize when, despite best efforts, work will not be done and notifies supervision.

Level 3: Attend to each area of responsibility, and if all are not being addressed, arrange for transfer or elimination of some of them. Ensure that all aspects of programs/projects are properly addressed to ensure success.

Examples of Behavioral Indicators:

- Seeks all necessary information to do the job well.
- Learns from experience in order to recognize when things are not right.
- Maintains a high level of task-related behavior.
- Continues to work diligently in the absence of supervision.
- Fully attends to seemingly minor as well as major aspects of each work assignment.

Performance Levels:

Satisfactory

Fully attends to work at hand; notes details, errors, and discrepancies and follows-up as necessary. Reliably performs and completes work. Punctual; respectful of others' time.

Superior

Notes relationship of own work to work of others to ensure all aspects are coordinated. Performs additional tasks and otherwise follows-up to ensure thoroughness.

20. JOB KNOWLEDGE – Knows information required to perform a specific job. Includes both widely available courses of study (for example, chemistry, human resources management, graphic arts) and City-specific information (parking regulation and ticketing practices; purchasing procedures; provisions of the City Charter).

Level of Competency Required by Job:

Level 1: Knowledge acquired after hire in a brief orientation, short training program, or through on-the-job training.

Level 2: Knowledge acquired through an apprenticeship or extensive training program, or long duration of job performance.

Level 3: Knowledge acquired through a prolonged external course of study and/or extensive training and experience within the City.

Examples of Behavioral Indicators:

- Performs work correctly/avoids technical (job content related) errors.
- Answers technical questions about work accurately.
- Asks few technical questions about the performance of routine work activities.
- Offers advice (“coaching”) to new employees regarding their work.
- Develops training programs for other employees.

Performance Levels:

Satisfactory

Sufficient job knowledge to perform work correctly independently. Answers technical questions about work correctly.

Superior

Expertise in technical job information sufficient to serve as a resource to others. May develop training manuals/programs and/or give internal and/or external presentations related to work.

1. Knowledge of information technology (IT) systems, communications systems and equipment, IT infrastructure, and IT facilities, including data centers, microwave, radio, paging, fiber and copper cabling, distributed antenna system, voice over Internet Protocol (VoIP), audio/visual, access control, networks, wireless networks, and I.P. cameras, as it applies to the City communications systems, sufficient to understand the design.
2. Knowledge of IT systems, communications systems, IT infrastructure, and IT facilities and equipment operational capabilities, including bandwidth, power output, budget loss, receiver sensitivity, noise figures, modulation characteristics, data rate, and traffic load analysis, in order to understand the design of a new system and to follow up on the modifications of the existing system.
3. Knowledge of technological developments in the telecommunications engineering field, such as paging, fiber and copper cabling, distributed antenna system, VoIP, audio/visual, access control, networks, wireless networks, and I.P. cameras, CAD (computer aided dispatch software), digital and analog carrier systems (microwave

and cable), and mobile radio (trunked and conventional), in order to follow up, understand, and assist with the system development.

4. Knowledge of design analysis techniques, mathematical models, engineering economics, computer simulations, and stability studies in order to determine feasibility, reliability, and maintainability of systems design.
5. Knowledge of mathematical formulas applicable to the analysis of intermodulation, radio interference, and propagation, on air or on waveguide and respective formulas.
6. Knowledge of FCC rules and regulations as they apply to local governments and public safety systems, such as police and fire, including propagation and loading formulas, in order to obtain FCC licenses and to justify channel assignments.
7. Knowledge of communication installation techniques and governmental regulations, such as FCC as it applies to operational parameters, including transmitter power, frequency, and modulation in order to design and install systems that meet applicable regulations.
8. Knowledge of applicable safety codes, such as California Fire Marshal Codes, U.L. (Underwriters Laboratory) requirements, National Fire Protection (NFP), and City alarm ordinances, in order to perform engineering studies.
9. Knowledge of CAO Rules, Mayor's Directives, and City Directives, policies, and procedures as they relate to processing requests for communications and/or installations such as service phone, data, radio, dispatch and alarm, and traffic signal circuits in order to formulate a recommended course of action.
10. Knowledge of City purchasing procedures sufficient to write purchase requisitions in order to initiate the procurement of communications equipment.
11. Knowledge of City policies and procedures as they relate to the record keeping requirements of City IT systems, communications systems, IT infrastructure, and IT facilities information such as cable terminations, radio licenses, and cross-referencing of user departments and licenses in order to comply with the requirements.
12. Knowledge of developments in the IT and communications field, such as network technologies, cabling and fiber optics systems and microwave and radio systems including legal considerations, in order to anticipate the need for planning changes to existing systems and to ensure future systems will remain technologically current.

13. Knowledge of the principles of computer software programming, automated diagnostics of Police and Fire FM radios, and automated diagnostics of the Police and Fire radio systems.
14. Ability to write technical reports, in order to support findings and/or recommendations made to management on IT systems, communications systems, IT infrastructure, and IT facilities topics, such as technical capabilities, alternative courses of action, projected costs, and proposals to remove equipment.
15. Knowledge of the basic principles such as communications principles, network, equipment installation and maintenance, and operating procedures in the field of communications or electrical engineering in order to understand or assist with the design, selection, installation, and maintenance of communication equipment.

26. ELECTRICAL UNDERSTANDING – Comprehends the concept and the operation of flow of electrical current.

Level of Competency Required by Job:

Level 1: Know the properties of electricity relevant to the work environment and work to be performed in order to correctly perform work and recognize hazards that will be created by the failure to do so.

Level 2: Sufficient understanding of electricity to recognize problems and determine repair needed to prevent disaster/restore operation.

Level 3: In-depth understanding of electrical principles and phenomena sufficient to design and/or oversee the installation of complex electrical systems.

Examples of Behavioral Indicators:

- Ensures safe physical work environment by taking actions such as eliminating exposed electrical wire, faulty connections, empty sockets, and overloaded circuits.
- Recognizes the danger of fire from faulty electrical installations.
- Uses tools, equipment, and instruments properly to accomplish electrical work correctly and safely.
- Systems designed and/or for which installation is overseen perform as intended upon completion.

Performance Levels:

Satisfactory

Understands the operation of electricity sufficient to readily learn and perform electrical work.

Superior

Displays exceptional insight into the operation of electrical systems, and makes correct inferences regarding them. Promptly and accurately troubleshoots problem.

34. CUSTOMER SERVICE – Interacts with recipients of services (internal or external customers) in a way that provides accurate, timely, and effective information and service.

Level of Competency Required by Job:

Level 1: Interact with customers in person, over the telephone, or through e-mail (and/or other electronic media) in order to provide information or assistance. Listen to customer concerns; explain/reconcile information and provide alternatives if possible; facilitate resolution by making referral and/or following-up as necessary.

Level 2: Promotes positive customer service. Serves as a model of providing exemplary customer service.

Level 3: Develop customer-oriented procedures; identifies changes in procedures to enhance customer service and ensures they are implemented.

Examples of Behavioral Indicators:

- Carefully listens to (or reads) customer statement of the issue.
- Provides direct, informative, accurate responses to customer.
- Suggests options if available.
- Maintains a positive attitude in the face of customer complaint or frustration.
- Remains focused on the issue presented by the customer and directs the customer back to the issue if necessary.
- Asks the customer if their concerns have been fully addressed.
- Ensures organizational policies and practices are customer-focused.
- Ensures all employees recognize their responsibility for customer service and are properly trained for it.

Performance Levels:

Satisfactory

Displays knowledge as well as courtesy and patience when interacting with customers. Ensures customers' issue is correctly identified and remains focused on it until it is resolved.

Superior

Seeks further information or advice to resolve difficult issues. Solicits feedback on the effectiveness of service. Makes suggestions for improving service and facilitates changes needed to implement.

45. ORAL COMMUNICATION – Communicates orally in a clear, concise, and effective manner.

Level of Competency Required by Job:

Level 1: Exchange specific, job-related information orally with others in the immediate work environment or via telephone and/or radio.

Level 2: Obtain/provide/present general and/or job-specific information orally to a variety of others in various situations.

Level 3: Obtain/provide/present a diverse array of information orally at varying levels of complexity to a wide range of others across many different situations and circumstances.

Examples of Behavioral Indicators:

- Audience clearly understands the intended message.
- Rarely must repeat information in response to questions.
- Refrains from use of unnecessary words, phrases, or jargon.
- Provides a level of detail appropriate to the situation (avoids too much or too little detail).

- Speaks at a level appropriate to the audience in terms of terminology, sentence structure, and simplicity/complexity of ideas expressed.
- Uses words with precision (vocabulary) to convey exact information.

Performance Levels:

Satisfactory

Speaks clearly and audibly, providing the appropriate information and level of detail. Typically conveys the message on the first attempt. Answers questions accurately and directly.

Superior

Speech is direct and to the point. Speaks convincingly and with authority when appropriate. Maintains sensitivity to the audience while providing thorough information with the appropriate level of detail through the use of precise language.