

FIRE ENGINEER**DEFINITION**

Under general supervision of a Fire Lieutenant or Fire Captain, operates and maintains fire fighting apparatus and equipment; responds to fires, medical emergencies, hazardous materials incidents, rescues, and other emergency and non-emergency situations; participates in all other suppression, prevention, inspection, education and related activities to protect life and property; performs fire station maintenance; provides information and assistance to the public; and performs related work as required.

CLASS CHARACTERISTICS

This is an advanced level in the fire service, qualified to drive and operate a truck, engine and all other vehicles, equipment and apparatus to perform all normal fire suppression, basic medical emergency, hazardous materials and other emergency response activities. Successful performance of the work requires the performance of heavy physical work at potential risk to health and safety. This class is distinguished from Firefighter/Paramedic in that the latter is qualified to provide EMT-Paramedic medical services in addition to performing the full range of duties as a Firefighter. It is further distinguished from Fire Lieutenant in that the latter is the first supervisory level in this sworn class series.

EXAMPLES OF DUTIES (Illustrative Only)

- Responds to fire alarms, emergency medical calls at the basic life support level, emergency rescues, hazardous materials incidents, public service calls or other incidents, which require the mitigation of circumstances that may threaten life or property.
- Drives and operates all fire equipment and locates the apparatus at the proper place at the scene.
- In a fire emergency, lays, connects, charges and uses supply lines and various water appliances to control and extinguish fires; places water curtains and performs ventilating and access maneuvers; uses foam and chemical extinguishers as required by the nature of the fire.
- Searches and rescues victims from buildings, motor vehicles, water hazards and other locations.
- Applies medical treatment and life support techniques within the scope of an Emergency Medical Technician (EMT); provides assistance to qualified paramedics, as directed; assists in the emergency transportation of patients.
- Contains, isolates and minimizes hazardous materials spills.
- Works closely with other emergency medical staff, police and public safety and fire personnel from other agencies; responds to mutual aid situations as required.
- Participates in investigations, clean-up, salvage and overhaul operations.
- Participates in the fire inspections of buildings and properties within the City on a regularly-scheduled basis.
- Maintains apparatus and vehicles in a clean and operable condition; troubleshoots and performs maintenance and repair on equipment; reports the need for major repair.

- Maintains the station and living quarters in a clean and orderly condition; performs minor maintenance on facilities and station equipment.
- Participates in drills and training sessions.
- Develops and maintains effective working relationships with the community; presents a variety of educational and public services programs to children, youth and community groups.
- Prepares reports; prepares and maintains logs, records and accurate files.
- May direct the work of a crew in the absence of a company officer or in emergency situations.

QUALIFICATIONS

Knowledge of:

- Practices and techniques of driving varied vehicles and operating a wide range of fire equipment and apparatus, including related hydraulics.
- Principles and practices of fire suppression, containment, rescue, clean-up and salvage.
- Principles and practices of providing emergency medical care at the EMT level.
- Practices and techniques of hazardous materials response, containment and clean-up.
- Basic maintenance practices for fire services vehicles, equipment and facilities.
- Applicable laws, codes and ordinances.
- Safety practices and equipment related to the work.
- Computer applications related to the work.
- Techniques of first aid and CPR.
- The geographic layout of the City and the surrounding areas and the location of various fire suppression utilities.
- Techniques for dealing with and solving the problems presented by a variety of individuals from various socio-economic, cultural and ethnic backgrounds, in person and over the telephone, often in emergency or stressful situations.

Skill in:

- Operating vehicles, equipment and apparatus safely and in conformance with department procedures and traffic laws.
- Performing fire suppression and associated rescue and salvage work in a safe and effective manner.
- Applying the mechanics of fire fighting and emergency medical care at an EMT level.
- Dealing with hazardous materials incidents in conformance with department procedures.
- Making sound, independent decisions in emergency situations.
- Maintaining accurate records and clear and accurate reports and other written materials.
- Interpreting, applying and explaining complex codes, regulations and ordinances.
- Coordinating and carrying out special assignments.
- Understanding and carrying out oral and written directions.
- Entering information into a computer with sufficient speed and accuracy to perform the work.

- Establishing and maintaining effective working relationships with those contacted in the course of the work.

Education and Experience:

Equivalent to graduation from high school supplemented by two years of experience as a Firefighter or Firefighter/Paramedic. Completion of two years of college level course work in fire technology or a related field is desirable.

License:

Must possess a valid California class B driver's license and have a satisfactory driving record. Must possess a valid EMT certificate and certification as a Firefighter I. Certification as a Fire Mechanic I and a Firefighter II are desirable.

Working Conditions:

Must be willing to work 24-hour shifts as scheduled by the department and to work with exposure to emergency circumstances, including hazardous materials and all weather conditions. Must be willing to pass a background investigation, including fingerprinting.

Physical Demands:

Must possess mobility and physical strength and stamina to respond to emergency situations and use all emergency apparatus and lift and move individuals or objects weighing more than 100 pounds; ability to work in a standard office setting and to operate motor vehicles; vision to discern colors and assess emergency situations, including medical incidents, and to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone and radio.