

Job Classification:  
Job Code:

**Fire Engineer**  
**5015**

**Minimum Preparation for Work:**

- ✓ Graduation from high school or equivalent; and
- ✓ Supplemented by at least 12 semester hours of college courses and three (3) years of firefighting experience as a State of Florida Certified Firefighter in the Pensacola Fire Department.
- ✓ Six (6) of the 12 required college semester hours to meet the minimum qualifications must include the below Fire Bureau of Fire Standards and Training Courses from the Florida State Fire College or the equivalent from an accredited college:

Fire Inspection Practices  
Fire Protection and Detection Systems

**Special Note:**

*Letters of intent from an accredited college, college transcripts or certification of completion from the Florida State Fire College in Ocala, will be accepted as documentation for the 12 semester hours of college. Forty (40) hour courses from the Florida State Fire College will be considered as three (3) college credits for purposes of examination. Courses that are less than forty (40) hours from the Florida State Fire College or from other non-accredited institutions must be evaluated by an accredited college, prior to college credits being assigned.*

**Necessary Special Requirements:**

- ✓ Possession of an appropriate driver license for equipment operated and any license, training or certification required by law or regulation to complete assigned tasks.

**Nature of Work:**

This is a classified position. Employees in this class, under general supervision, drive fire equipment to and from alarms. Many of the duties are performed under emergency conditions and could involve personal hazard.

**Essential Job Functions:**

- Operates engine pumps, hydraulic ladders, aerial platforms, crash/rescue apparatus, and other firefighting equipment and otherwise performs as a firefighter at the scene of the fire.
- Performs routine tests, inspections, and servicing functions required to assure the operational status of fire department vehicles.
- Performs efficient salvage operations, ventilation procedures, inspecting, testing, and maintenance of the apparatus and equipment.
- Performs assigned fire inspections; keeps accurate records.
- Performs prolonged and difficult work under hazardous conditions.
- Relieves officer of higher rank at which time is responsible for equipment, personnel, and supervisory decisions at emergency scenes.

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- Work involves aiding in rescue calls and administering basic life support to victims in emergencies.
- Attends classes in cardio-pulmonary resuscitation and other lectures and demonstrations.
- Deals with such hazardous rescue conditions as toxic atmosphere in structural fires, train derailments, hazardous chemical leaks, drownings, weakened structures, natural disasters (i.e., flooding, hurricanes), excavation of cave-ins, bulk fuel storage fires, shipboard fires, or arson.
- Performs extrications of victims of automobile accidents, provides traffic control, crowd control, and basic life support.
- Performs basic domestic chores around the station, maintaining an atmosphere of cleanliness and orderliness.
- Stands watches to be of assistance to the public on a 24-hour basis, answering phones and listing information received, filling out miscellaneous reports, as well as greeting the public in courteous manner.
- Attends drills with assigned company at the station and drill tower.
- Attends classes and seminars dealing with such subjects as chemistry, building construction and materials, blue print reading, public speaking, and apparatus operations.
- Aids in fire hydrant inspection.

### **Knowledge, Skills and Abilities:**

- Must be thoroughly capable of operating pumpers and regulating pressure in accordance with principles of hydraulics and from directions of superior officers.
- Must be able to understand and follow verbal assignments without supervision in the most adverse conditions and situations.
- Have a basic knowledge of mathematic principles as they apply to fire science application.
- Thorough working knowledge in the handling and disposal of hazardous chemicals and their reactions to heat, water, and the mixing with other chemicals.
- Thorough knowledge of fire suppression and fire prevention techniques, with the basic ability to improvise and adapt to a particular fire ground situation.
- Thorough knowledge of the rules and regulations of the fire department.
- Thorough knowledge of breathing apparatus.
- Thoroughly acquainted with air/crash rescue apparatus and operations.
- Thorough knowledge of portable extinguisher, their effective use and limitations.
- Thorough knowledge of operating procedures of elevators in emergency situations pertinent to evacuation, ventilation, and fire safety.

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- Thorough knowledge of rescue and extrication of victims from aircraft incidents whether through normal or emergency exits, and forced entry points.
- Knowledge of building codes and the ability to use them in the performance of building inspections.
- Knowledge of procedures and operations of communication equipment.
- Knowledge of emergency plan for regional airport, airport hydrants, and all buildings.
- Understand basic principles of psychology as they relate to the fire service.
- Understand basic safety principles as they apply to the fire protection organization.
- Understand fire behavior such as the fire tetrahedron, mushrooming, time temperature curves, and smoke color identification.
- Good knowledge of aircraft firefighting procedures, including response, size-up, approach, vehicle position, attach, rescue, extinguishment, salvage, and overhaul.
- Ability to plan, organize, assign, supervise, and inspect the work of subordinates.
- Ability to prepare accurate and concise reports and have an understanding of written and verbal communications.
- Ability to use basic hand tools and more complicated devices such as pneumatic chisel, jaws of life, and explosive forcible entry tools.
- Ability to exercise good judgment in evaluating life support equipment.
- Ability to aid in gathering information, maps, and preparing a pre-fire, pre-disaster plan to cope with large-scale emergency situations.
- Ability to show self-confidence to establish calmness at emergency situations.
- Ability to establish and maintain effective working relationships with associates and the general public.

*The mental and physical demands and the work environment characteristics described below are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

### **Mental and Physical Requirements:**

While performing the duties of this job, the employee is regularly required to use hands and fingers to hold or feel, reach with hands and arms, walk, talk, smell and hear. The employee is occasionally required to stand, sit, climb, balance, stoop, crouch and crawl. Specific vision abilities include close, distance, color, peripheral vision, and depth perception.

The employee regularly lifts and/or moves up to 50 pounds and occasionally lifts and/or moves over 100 pounds.

### **Work Environment:**

An employee in this job is frequently exposed to outside weather conditions, occasionally exposed to wet and/or humid conditions, toxic or caustic chemicals, extreme

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heat and has a risk of electrical shock. The noise level in the work environment may be loud.

*This description is not intended to be, nor should it be construed as an all-inclusive list of responsibilities, skills or working conditions associated with the position. It is intended to accurately reflect the activities and requirements of the position, but duties may be added, deleted, or modified as necessary. This description does not constitute a written or implied contract of employment.*

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