

Code: 8733

Family: Public Safety Service: Public Safety Group: Fire Service Series: Firefighting

# **CLASS TITLE: FIRE ENGINEER**

## CHARACTERISTICS OF THE CLASS

Under supervision, this class functions as a uniform member of the Chicago Fire Department responding to fire alarms, emergency medical calls, and other emergency calls to protect life and property. Positions in the class operate and maintain the fire engine, hydraulic pump system, and related fire equipment and apparatus; and performs related duties as required

## **ESSENTIAL DUTIES**

- Conducts visual and operational inspections of the fire engine, including apparatus systems, components, tools, equipment, and fittings, to ensure proper maintenance and readiness for response
- Drives the fire engine to the scene of emergency and non-emergency situations using the most direct route and obeying department and other applicable guidelines and procedures for safe transportation
- Positions the engine appropriately for operation at the scene considering the nature of the emergency, water source, environmental conditions, and potential hazards
- Connects and disconnects fire hose to a source of water, fire engine's hydraulic pump, building fire suppression systems, and various elevated and non-elevated fire suppression platforms
- Operates hydraulic pump systems used in firefighting and adjusts equipment during operation
- Calculates, achieves, and maintains appropriate hydraulic intake and discharge pressures
- Conducts drills on fire engine operations
- Communicates clearly and concisely, via radio, with supervisors and Office of Emergency Management and Communications (OEMC)
- Cleans and lubricates engine motor and pump, services equipment, and tests pump for proper operating efficiency
- Stands fire watch duty, as required
- Completes appropriate documentation and reports in a timely manner and in accordance with administrative guidelines
- Participates in drills, demonstrations, and instructional courses on fire apparatus, hydraulics, pump operation and maintenance, and firefighting techniques
- May provide work assignments, evaluation, training, and guidance to others
- May be required to assume supervisory role as Acting Company Officer

**NOTE**: The list of essential duties is not intended to be inclusive; there may be other duties that are essential to particular positions within the class.

## MINIMUM QUALIFICATIONS

## **Education, Training, and Experience**

• Career Service status as a Firefighter, Firefighter/EMT or Firefighter/Paramedic in the Chicago Fire Department.

## Licensure, Certification, or Other Qualifications

- Must possess the following driver's license and Illinois Office of the State Fire Marshal (OSFM) certification:
  - o Valid Illinois State Driver's license of Class A or B (CDL) or Class A or B (Non-CDL)
  - o Fire Service Vehicle Operator Certification issued by the OSFM

## **WORKING CONDITIONS**

- Extreme weather conditions
- Hazardous conditions (e.g., flames, fire, chemicals, smoke, heat, gases, moving vehicles, falling structures and debris, electricity, poor ventilation, poor lighting and related hazardous)
- Extreme heat/cold
- Stressful situations and heights
- Public safety work environment

## **EQUIPMENT**

- Firefighting personal protection and related equipment (PPE)
- Firefighting tools and apparatus
- Two-way radios
- Hazardous material equipment

## PHYSICAL REQUIREMENTS

- Must continue to adhere to all physical requirements as noted in Firefighter, Firefighter/EMT, or Firefighter/Paramedic classifications
- Stressful and physically demanding environment
- Maintain good physical condition necessary for sitting, standing, walking, running, climbing ladders, bending, stooping, crouching, and kneeling for prolonged periods of time
- Lift, drag, hoist, and carry different types of fire equipment and other objects
- Stamina and physical endurance needed to sustain prolonged, rigorous physical activity during emergency situations.
- Physical dexterity as needed to don equipment quickly, tie knots, etc.
- Hearing and recognizing the normal range of sounds in terms of loudness, pitch, tone
- Seeing detail at various distances (e.g., normal reading distance, beyond arm length)
- Standing for extended or continuous periods of time
- Safely and lawfully operating automotive vehicles and associated equipment
- Remaining alert or vigilant and reacting to infrequent but important events or specific details within a stream of information (e.g., alarms, radio)
- Physical demands include the ability to lift, push/pull, hold and carry in excess of 50 pounds.
  Very heavy work exerting in excess of 100 pounds of force occasionally, and/or in excess of 50 pounds of force frequently, and/or in excess of 20 pounds of force constantly to move objects.

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# KNOWLEDGE, SKILLS, ABILITIES, AND OTHER WORK REQUIREMENTS Knowledge

Good knowledge of:

- \*Department orders and other written policies and procedures (e.g., General Orders and addenda, Special Directives, Memoranda, SOPs, Rules and Regulations, Policies and Procedures, Code of Professional Conduct, and Labor Agreements of the Chicago Fire Department)
- department response levels, chain of command, and incident command procedures at emergency incidents
- \*Illinois Rules of the Road and state and local laws, rules, and regulations relating to the operation of an emergency vehicle
- firefighting personal protection and related equipment (PPE) use and maintenance
- \*standard fire engine operation policies and procedures
- \*radio communication procedures and protocols
- layout of streets within the assigned still and box district
- \*building construction, fire behavior, size up procedures, and fireground tactics for incident operations
- various detection, alarm and extinguishments systems found in buildings (i.e., standpipes, sprinklers, etc.) and how to operate those systems
- \*Firefighter equipment and apparatus use and maintenance
- \*emergency medical service and basic life support principles, practices, and techniques
- \*department forms, reports, and other documentation and related procedures
- \*basic life support principles, practices, and techniques

Some knowledge of:

- applicable writing techniques for preparation of required reports and forms
- applicable computer software packages and applications
- \*personnel administration and management principles, practices, and techniques

Knowledge of applicable City and department policies, procedures, rules, and regulations

## Skills

- \*ACTIVE LISTENING Give full attention to what other people are saying, take time to understand the points being made, ask questions as appropriate, and not interrupt at inappropriate times
- \*ACTIVE LEARNING Understand the implications of new information for both current and future problem-solving and decision-making
- \*CRITICAL THINKING Use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems
- INSTRUCTING Teach others how to do something
- \*JUDGEMENT AND DECISION MAKING Consider the relative costs and benefits of potential actions to choose the most appropriate one

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- \*MATHEMATICS Use mathematics to solve problems
- \*OPERATION MONITORING Watch gauges, dials, or other indicators to make sure a machine is working properly
- TROUBLESHOOTING Determine causes of operating errors and decide what to do about it
- \*PROBLEM IDENTIFICATION AND ANALYSIS The ability to quickly identify a problem and to analyze it; to notice details or phenomena; to sort out pertinent information; to foresee the consequences of various alternatives

## **Abilities**

- \*COMPREHEND ORAL INFORMATION Listen to and understand information and ideas presented through spoken words and sentences
- \*SPEAK Communicate information and ideas in speaking so others will understand
- \*COMPREHEND WRITTEN INFORMATION Read and understand information and ideas presented in writing. Use reference materials (e.g., map books, hazardous materials guides, etc.)
- \*WRITE Communicate information and ideas in writing so others will understand
- \*RECOGNIZE PROBLEMS Tell when something is wrong or is likely to go wrong
- \*REASON TO SOLVE PROBLEMS Apply general rules to specific problems to produce answers that make sense

## **Other Work Requirements**

- \*INITIATIVE Demonstrate willingness to take on job challenges
- \*ADAPTABILITY/FLEXIBILITY Be open to change (positive or negative) and to considerable variety in the workplace
- \*DEPENDABILITY Demonstrate reliability, responsibility, and dependability and fulfill obligations
- \*ATTENTION TO DETAIL Pay careful attention to detail and thoroughness in completing work tasks
- \*STRESS TOLERANCE Accept criticism and deal calmly and effectively with high stress situations
- \*PERSISTENCE Persist in the face of obstacles on the job
- \*COOPERATION Be pleasant with others on the job and display a good-natured, cooperative attitude

All employees of the City of Chicago must demonstrate commitment to and compliance with applicable state and federal laws, and City ordinances and rules; the City's Ethics standards; and other City policies and procedures.

The City of Chicago will consider equivalent foreign degrees, accreditations, and credentials in evaluating qualifications.

\* May be required at entry.

City of Chicago Department of Human Resources February, 2022