

FIRE SERVICE OPERATIONS, ASSOCIATE IN APPLIED SCIENCE



College(s): MX

Program Code: 0414

The Fire Service Operations degree focuses on fire suppression and prevention and general emergency response operations with a target population of the college student interested in a career in emergency and fire service but not yet employed by a department.

Program Requirements

Code	Title	Hours
General Education Coursework		
ENGLISH 101	Composition	3
ENGLISH 102	Composition	3
	or SPEECH 101 Fundamentals of Speech Communication	
MATH 118	General Education Math (or higher gen ed math course)	4
PSYCH 201	General Psychology (or higher General Education Psychology)	3
SOC 201	Intro To the Study Of Society (or higher General Education Sociology)	3
Select a Human Diversity Course that is a Gen Ed. ¹		3
Select one of the following science courses:		4
BIOLOGY 116	Introduction to Anatomy And Physiology	
BIOLOGY 121	Biology I	
BIOLOGY 226	Human Structure and Function I	
CHEM 121	Basic Chemistry I	
CHEM 201	General Chemistry I	
Required Program Core		
EMT 101	Emergency Medical Technician-Basic	8
FIREMGT 101	Principles of Emergency Services	3
FIREMGT 103	Fire Behavior and Combustion	3
FIREMGT 197	Principles of Emergency Responder Safety and Survival	3

FIREMGT 202	Building Construction for Fire Science	3
FIREMGT 203	Fire Suppression and Protection Systems	3
FIREMGT 210	Principles of Fire Prevention	3

Program Electives

Select a minimum of 12 credits of the following: 12

FIREMGT 102	Strategies and Tactics I
FIREMGT 104	Occupational Safety & Health for Emergency Services
FIREMGT 198	Strategies and Tactics II
FIREMGT 205	Chemistry of Hazardous Materials
FIREMGT 212	Fire Investigation I
FIREMGT 213	Fire Investigation II
FIREMGT 220	Fire Instructor I
FIREMGT 221	Fire Instructor II

Total Hours 61

1

Human Diversity Courses < City Colleges of Chicago (ccc.edu) (<https://catalog.ccc.edu/hd/>)

Pathway

This is an **example course sequence** for students interested in earning a degree in Fire Service Operations. If this pathway is followed as outlined, you will earn an Associate in Applied Science (AAS) degree in Fire Service Operations. It does not represent a contract, nor does it guarantee course availability. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below.

Check the program webpage (<https://www.ccc.edu/colleges/malcolm-x/departments/Pages/Fire-Science.aspx>) **for details about session dates and times.**

Semester-by-Semester Program Plan for Full-Time Students

All plans can be modified to fit the needs of part-time students by adding more semesters.

Semester 1	Hours
ENGLISH 101 Composition ¹	3
ENGLISH 102 Composition ¹ or SPEECH 101 or Fundamentals of Speech Communication	3
FIREMGT 101 Principles of Emergency Services	3
Select one of the following science courses. ¹	4
BIOLOGY 116 Introduction to Anatomy And Physiology	
BIOLOGY 121 Biology I	
BIOLOGY 226 Human Structure and Function I	
CHEM 121 Basic Chemistry I	
CHEM 201 General Chemistry I	
Select an HD course that is a Gen Ed. ^{1, 3}	3
Hours	16
Semester 2	Hours
EMT 101 Emergency Medical Technician-Basic	8
MATH 118 General Education Math (or higher gen ed math course) ¹	4
FIREMGT 103 Fire Behavior and Combustion	3
Hours	15
Semester 3	Hours
FIREMGT 212 Fire Investigation I ²	3
FIREMGT 197 Principles of Emergency Responder Safety and Survival	3
FIREMGT 203 Fire Suppression and Protection Systems	3
FIREMGT 202 Building Construction for Fire Science	3
PSYCH 201 General Psychology ¹	3
Hours	15
Semester 4	Hours
FIREMGT 210 Principles of Fire Prevention	3
FIREMGT 220 Fire Instructor I	3
FIREMGT 198 Strategies and Tactics II ²	3
SOC 201 Intro To the Study Of Society (or higher General Education Sociology course) ¹	3
FIREMGT 104 Occupational Safety & Health for Emergency Services ²	3
Hours	15
Total Hours	61

1

General Education Requirement

2

Program Elective (p. 2)

3

Human Diversity Courses < City Colleges of Chicago (ccc.edu) (<https://catalog.ccc.edu/hd/>)

Program Elective Associate in Applied Science Electives

Code	Title	Hours
FIREMGT 102	Strategies and Tactics I	3
FIREMGT 104	Occupational Safety & Health for Emergency Services	3
FIREMGT 198	Strategies and Tactics II	3
FIREMGT 205	Chemistry of Hazardous Materials	3
FIREMGT 212	Fire Investigation I	3
FIREMGT 213	Fire Investigation II	3

FIREMGT 220	Fire Instructor I	3
FIREMGT 221	Fire Instructor II	3

Choose your courses with your College Advisor.

Careers

This program can prepare students for the jobs listed below. Click on each one to learn more, including average earnings, annual job openings, and how much education people in that field have. For additional guidance and resources on career options, current City Colleges students and alumni can contact the Career Services Office (<https://www.ccc.edu/departments/Pages/Career-Services.aspx>).

Firefighters

Job Description

Control and extinguish fires or respond to emergency situations where life, property, or the environment is at risk. Duties may include fire prevention, emergency medical service, hazardous material response, search and rescue, and disaster assistance.

Salary Based on Experience Level

Take a look at the average hourly/annual earnings for this career in Cook County

Lightcast earnings figures are based on OES data from the BLS and include base rate, cost of living allowances, guaranteed pay, hazardous-duty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

Annual Wages

Entry-Level 10 th Percentile	\$39,109
Median 50 th Percentile	\$78,109
Senior-Level 90 th Percentile	\$116,841

Hourly Wages

Entry-Level 10 th Percentile	\$19
Median 50 th Percentile	\$38
Senior-Level 90 th Percentile	\$56

Annual Job Openings

571 annual openings in Cook County

National Education Attainment

Here, you can see the level of education that people in this career complete.

Degree Program	% of Jobs
A high school diploma or less	45.25%
A certificate	24.60%
Some college	19.50%
An Associate degree	7.15%
A Bachelor's degree	0.43%
A Master's or Professional degree	2.96%
A Doctoral degree or more	0.10%

3.49% continue their education beyond an associate degree

Fire Inspectors and Investigators

Job Description

Inspect buildings to detect fire hazards and enforce local ordinances and state laws, or investigate and gather facts to determine cause of fires and explosions.

Salary Based on Experience Level

Take a look at the average hourly/annual earnings for this career in Cook County

Lightcast earnings figures are based on OES data from the BLS and include base rate, cost of living allowances, guaranteed pay, hazardous-duty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

Annual Wages	
Entry-Level 10 th Percentile	\$37,595
Median 50 th Percentile	\$81,511
Senior-Level 90 th Percentile	\$177,535

Hourly Wages	
Entry-Level 10 th Percentile	\$18
Median 50 th Percentile	\$39
Senior-Level 90 th Percentile	\$85

Annual Job Openings

24 annual openings in Cook County

National Education Attainment

Here, you can see the level of education that people in this career complete.

Degree Program	% of Jobs
A high school diploma or less	29.44%
A certificate	27.49%
Some college	26.01%
An Associate degree	12.82%
A Bachelor's degree	2.19%
A Master's or Professional degree	2.04%
A Doctoral degree or more	0.00%

4.23% continue their education beyond an associate degree

Forest Fire Inspectors and Prevention Specialists

Job Description

Enforce fire regulations, inspect forest for fire hazards, and recommend forest fire prevention or control measures. May report forest fires and weather conditions.

Salary Based on Experience Level

Take a look at the average hourly/annual earnings for this career in Cook County

Lightcast earnings figures are based on OES data from the BLS and include base rate, cost of living allowances, guaranteed pay, hazardous-duty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

Annual Wages	
Entry-Level 10 th Percentile	\$63,300
Median 50 th Percentile	\$63,424
Senior-Level 90 th Percentile	\$100,664

Hourly Wages	
Entry-Level 10 th Percentile	\$30
Median 50 th Percentile	\$30
Senior-Level 90 th Percentile	\$48

Annual Job Openings

3 annual openings in Cook County

National Education Attainment

Here, you can see the level of education that people in this career complete.

Degree Program	% of Jobs
A high school diploma or less	31.63%
A certificate	8.92%
Some college	17.52%
An Associate degree	17.90%
A Bachelor's degree	24.03%
A Master's or Professional degree	0.00%
A Doctoral degree or more	0.00%

24.03% continue their education beyond an associate degree