# FIRE SCIENCE MANAGEMENT, ASSOCIATE IN APPLIED SCIENCE



College(s): MX

Program Code: 0413

The Fire Science Management degree is designed to concentrate on management and officer training with a target population of those who are already employed in a fire service and particularly addressing the specific higher education needs of the Chicago Fire Department (CFD).

## **Program Requirements**

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Code	Title	Hours
<b>General Education</b>	n Coursework	
ENGLISH 101	Composition	3
MATH 118	General Education Math	4
PSYCH 201	General Psychology	3
BIOLOGY 114	General Education Biology	4
or CHEM 121	Basic Chemistry I	
Select one of the	following Human Diversity (HD) courses:	3
HUM 212	Non-Western Humanities	
LIT 128	Latin American Literature	
LIT 131	Survey Of Afro-American Poetry	
LIT 150	Women's Literature	
Required Program	n Core	
EMT 101	Emergency Medical Technician-Basic	8
FIREMGT 101	Principles of Emergency Services	3
FIREMGT 102	Strategies and Tactics I	3
FIREMGT 103	Fire Behavior and Combustion	3
FIREMGT 197	Principles of Emergency Responder Safety and Survival	3
FIREMGT 198	Strategies and Tactics II	3
FIREMGT 200	Management and Leadership I	3

FIREMGT 204	Management and Leadership II	3
FIREMGT 210	Principles of Fire Prevention	3
FIREMGT 220	Fire Instructor I	3
<b>Program Electives</b>	S	
Select a minimum	of nine credit hours of the following:	9
FIREMGT 104	Occupational Safety & Health for Emergency Services	
FIREMGT 201	Fire Service Hydraulics	
FIREMGT 202	Building Construction for Fire Science	
FIREMGT 203	Fire Suppression and Protection Systems	
FIREMGT 205	Chemistry of Hazardous Materials	
FIREMGT 206	Management and Operations III	
FIREMGT 211	Management Operations IV	
FIREMGT 221	Fire Instructor II	

## **Pathway**

**Total Hours** 

This is an **example course sequence** for students interested in earning a degree in Fire Science Management. If this pathway is followed as outlined, you will earn an Associate in Applied Science (AAS) degree in Fire Science Management. 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.

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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
Fall		
ENGLISH 101	Composition <sup>1</sup>	3
BIOLOGY 114	General Education Biology <sup>1</sup>	4
or CHEM 121	or Basic Chemistry I	
MATH 118	General Education Math <sup>1</sup>	4
FIREMGT 101	Principles of Emergency Services	3
	Hours	14
Semester 2		
Spring		
EMT 101	Emergency Medical Technician-Basic	8
FIREMGT 103	Fire Behavior and Combustion	3
FIREMGT 200	Management and Leadership I	3
	Hours	14
Semester 3		
Summer		
FIREMGT 204	Management and Leadership II	3
Select one of the fol	llowing:	3
HUM 212	Non-Western Humanities (HD) <sup>1</sup>	
LIT 128	Latin American Literature (HD) <sup>1</sup>	
LIT 131	Survey Of Afro-American Poetry (HD) 1	
LIT 150	Women's Literature (HD) <sup>1</sup>	
	Hours	6
Semester 4		
Fall		
FIREMGT 102	Strategies and Tactics I	3
FIREMGT 197	Principles of Emergency Responder Safety and Survival	3
FIREMGT 220	Fire Instructor I	3
FIREMGT 206	Management and Operations III <sup>2</sup>	3
PSYCH 201	General Psychology <sup>1</sup>	3
	Hours	15
Semester 5		
Spring		
FIREMGT 211	Management Operations IV <sup>2</sup>	3
FIREMGT 210	Principles of Fire Prevention	3
FIREMGT 198	Strategies and Tactics II	3
FIREMGT 221	Fire Instructor II <sup>2</sup>	3
	Hours	12
	Total Hours	61

**General Education Requirement** 

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Program ElectiveS

Associate in Applied Science Electives			
Code	Title	Hours	
FIREMGT 104	Occupational Safety & Health for Emergency Services	3	
FIREMGT 201	Fire Service Hydraulics	3	
FIREMGT 202	Building Construction for Fire Science	3	
FIREMGT 203	Fire Suppression and Protection Systems	3	
FIREMGT 205	Chemistry of Hazardous Materials	3	

FIREMGT 206	Management and Operations III	3
FIREMGT 211	Management Operations IV	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).

## First-Line Supervisors of Firefighting and Prevention Workers

#### **Job Description**

Directly supervise and coordinate activities of workers engaged in firefighting and fire prevention and control.

#### **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, hazardousduty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

Annual Wages Entry-Level 10 <sup>th</sup> Percentile Median 50 <sup>th</sup> Percentile Senior-Level 90 <sup>th</sup> Percentile	\$78,116 \$119,966 \$154,156
Hourly Wages Entry-Level 10 <sup>th</sup> Percentile Median 50 <sup>th</sup> Percentile Senior-Level 90 <sup>th</sup> Percentile	\$38 \$58 \$74

#### **Annual Job Openings**

101 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	32.30%
A certificate	18.72%
Some college	11.76%
An Associate degree	23.84%
A Bachelor's degree	13.24%
A Master's or Professional degree	0.02%
A Doctoral degree or more	0.12%

13.38% continue their education beyond an associate degree

## **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, hazardousduty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

#### **Annual Wages**

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

#### **Hourly Wages**

Entry-Level 10 <sup>th</sup> Percentile	\$19
Median 50 <sup>th</sup> Percentile	\$38
Senior-Level 90 <sup>th</sup> 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, hazardousduty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

\$85

#### **Annual Wages**

Entry-Level 10 <sup>th</sup> Percentile	\$37.595
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Median 50 <sup>th</sup> Percentile	\$81,511
Senior-Level 90 <sup>th</sup> Percentile	\$177,535
Hourly Wages	
Entry-Level 10 <sup>th</sup> Percentile	\$18
Median 50 <sup>th</sup> Percentile	\$39

### **Annual Job Openings**

Senior-Level 90<sup>th</sup> Percentile

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, hazardousduty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

#### **Annual Wages**

Entry-Level 10<sup>th</sup> Percentile \$63,300 Median 50<sup>th</sup> Percentile \$63,424 Senior-Level 90<sup>th</sup> Percentile \$100,664

Hourly Wages Entry-Level 10<sup>th</sup> Percentile Median 50<sup>th</sup> Percentile \$30 \$30 Senior-Level 90<sup>th</sup> 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