

## **Market Analysis for Fire Science Technology**

*Prepared by the Office of Research  
Teaming to Serve Research Needs of the College  
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## Introduction

There are 11 local two-year colleges that compete with Harper College's Fire Science Technology program. Included in this report is a list of competitor colleges that offer a similar program. In addition, local, state, and national employment projections and wage data for related positions are provided. The list of competitor colleges within a 50 mile radius was obtained through the IPEDS – COOL website (<http://www.nces.ed.gov/ipeds/cool>) and college-specific program information was obtained from each identified college's website.

**Table 1: Fire Science Technology Competitor Colleges (within 50 mile radius)**

Major Competitor	Length of Program	Credit hour
Harold Washington College (City College of Chicago) – Chicago, IL	<b>AA</b> – Pre-Public Safety, 62 credits. <b>AAS</b> – Fire Science Technology, 60 credits.	\$72/credit; \$189.95/credit (out-of-district)
College of DuPage – Glen Ellyn, IL	<b>AAS</b> – Fire Science Technology, 64 credits. <b>Certificate</b> – Fire Officer, 33 credits. <b>Certificate</b> – Fire Prevention, 24 credits. <b>Certificate</b> – Firefighter, 18 credits.	\$103/credit; \$292/credit (out-of-district)
College of Lake County – Grayslake, IL	<b>AAS</b> – Fire Science Technology, 60 credits.	\$90/credit; \$215/credit (out-of-district)
Elgin Community College – Elgin, IL	<b>AAS</b> – Fire Science & Safety, 61-64 credits. <b>Certificate</b> – Fire Science & Safety, 31 credits. <b>Basic Certificate</b> – Fire Officer I, 15 credits. <b>Basic Certificate</b> – Fire Science, 7 credits. <b>Basic Certificate</b> – Hazardous Materials & Apparatus, 7 credits.	\$91/credit; \$359.30/credit (out-of-district)
Joliet Junior College – Joliet, IL	<b>AAS</b> – Fire Science Technology, 64 credits. <b>Certificate</b> – Firefighter, 34 credits. <b>Certificate</b> – Fire Science, 33 credits. <b>Certificate</b> – Fire Service Administration, 30 credits.	\$76/credit; \$232.77/credit (out-of-district)
McHenry Community College – Crystal Lake, IL	<b>AAS</b> – Fire Science, 60 credits. <b>Certificate</b> – Fire Officer I, 21 credits. <b>Certificate</b> – Firefighter II, 12 credits.	\$80/credit; \$277.58/credit (out-of-district)
Moraine Valley Community College – Palos Hills, IL	<b>AAS</b> – Fire Science Technology, 62 credits. <b>Certificate</b> – Firefighter Specialist, 32 credits. <b>Certificate</b> – Fire Inspection, 30 credits.	\$72/credit; \$204/credit (out-of-district)
Oakton Community College – Des Plaines, IL	<b>AAS</b> – Fire Science Technology, 60 credits. <b>Certificate</b> – Fire Science Technology, 30 credits. <b>Certificate</b> – Basics of Fire Fighting, 12 credits.	\$84.60/credit; \$236.46/credit (out-of-district)
Prairie State College – Chicago Heights, IL	<b>AAS</b> – Fire Science Technology, 62 credits. <b>Certificate</b> – Fire Science Technology, 24 credits.	\$87/credit; \$244/credit (out-of-district)
Triton College – River Grove, IL	<b>AAS – Fire Science Technology, 65 credits. Certificate – Fire Science Technology, 30 credits.</b>	\$61/credit; \$179.80/credit (out-of-district)

**Table 1: Continued**

<b>Major Competitor</b>	<b>Length of Program</b>	<b>Credit hour</b>
Waubonsee Community College – Sugar Grove, IL	<b>AAS</b> – Fire Science Technology, 65 credits. <b>Certificate</b> – Fire Officer I, 37 credits. <b>Certificate</b> – Fire Service Instructor, 25 credits. <b>Certificate</b> – Firefighter, 23 credits. <b>Certificate</b> – Fire Officer II, 12 credits.	\$75/credit; \$224.61/credit (out-of-district)

**Table 2: Fire Science Technology Employment Projections**

<b>Chicago PMSA*</b>		<b>Employment</b>		<b>Employment Change</b>		<b>Average Yearly Job Openings</b>		
<b>SOC CODE</b>	<b>Occupational Title</b>	<b>2004 Number</b>	<b>2014 Number</b>	<b>2004 – 2014 Number</b>	<b>% Change</b>	<b>Due to New</b>	<b>Due to Replacements</b>	<b>Average Yearly Total</b>
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	1,384	1,542	157	11.35	16	57	73
33-2011	Fire Fighters	11,079	12,610	1,531	13.82	153	321	474
33-2021	Fire Inspectors and Investigators	481	415	-66	-13.71	-7	14	7
33-2022	Forest Fire Inspectors and Prevention Specialists	13	11	-1	-8.97	0	0	0
<b>Cook County*</b>		<b>Employment</b>		<b>Employment Change</b>		<b>Average Yearly Job Openings</b>		
<b>SOC CODE</b>	<b>Occupational Title</b>	<b>2004 Number</b>	<b>2014 Number</b>	<b>2004 – 2014 Number</b>	<b>% Change</b>	<b>Due to New</b>	<b>Due to Replacements</b>	<b>Average Yearly Total</b>
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	982	1,090	108	11.02	11	40	51
33-2011	Fire Fighters	7,815	8,850	1,036	13.25	104	227	331
33-2021	Fire Inspectors and Investigators	344	297	-48	-13.85	-5	10	5
33-2022	Forest Fire Inspectors and Prevention Specialists	9	8	-1	-9.19	0	0	0

\*Employment projections are from <http://www.ilworkinfo.com>

**Table 2: Continued**

<b>DuPage County*</b>		<b>Employment</b>		<b>Employment Change</b>		<b>Average Yearly Job Openings</b>		
<b>SOC CODE</b>	<b>Occupational Title</b>	<b>2004 Number</b>	<b>2014 Number</b>	<b>2004 – 2014 Number</b>	<b>% Change</b>	<b>Due to New</b>	<b>Due to Replacements</b>	<b>Average Yearly Total</b>
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	178	208	30	16.56	3	7	10
33-2011	Fire Fighters	1,493	1,794	302	20.21	30	43	73
33-2021	Fire Inspectors and Investigators	58	52	-6	-9.67	-1	2	1
33-2022	Forest Fire Inspectors and Prevention Specialists	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Lake County*</b>		<b>Employment</b>		<b>Employment Change</b>		<b>Average Yearly Job Openings</b>		
<b>SOC CODE</b>	<b>Occupational Title</b>	<b>2004 Number</b>	<b>2014 Number</b>	<b>2004 – 2014 Number</b>	<b>% Change</b>	<b>Due to New</b>	<b>Due to Replacements</b>	<b>Average Yearly Total</b>
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	105	123	18	17.11	2	4	6
33-2011	Fire Fighters	844	1,007	163	19.32	16	24	40
33-2021	Fire Inspectors and Investigators	37	34	-3	-8.86	0	1	1
33-2022	Forest Fire Inspectors and Prevention Specialists	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Employment projections are from <http://www.ilworkinfo.com>

**Table 2: Continued**

<b>McHenry County*</b>		<b>Employment</b>		<b>Employment Change</b>		<b>Average Yearly Job Openings</b>		
<b>SOC CODE</b>	<b>Occupational Title</b>	<b>2004 Number</b>	<b>2014 Number</b>	<b>2004 – 2014 Number</b>	<b>% Change</b>	<b>Due to New</b>	<b>Due to Replacements</b>	<b>Average Yearly Total</b>
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	44	47	3	7.25	0	2	2
33-2011	Fire Fighters	360	392	32	9.02	3	10	13
33-2021	Fire Inspectors and Investigators	15	12	-3	-16.80	0	0	0
33-2022	Forest Fire Inspectors and Prevention Specialists	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Statewide*</b>		<b>Employment</b>		<b>Employment Change</b>		<b>Average Yearly Job Openings</b>		
<b>SOC CODE</b>	<b>Occupation Title</b>	<b>2004 Number</b>	<b>2014 Number</b>	<b>2004 – 2014 Number</b>	<b>% Change</b>	<b>Due to New</b>	<b>Due to Replacements</b>	<b>Average Yearly Total</b>
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	2,089	2,328	239	11.44	24	86	110
33-2011	Fire Fighters	16,660	18,965	2,305	13.84	231	483	714
33-2021	Fire Inspectors and Investigators	751	647	-104	-13.85	0	21	21
33-2022	Forest Fire Inspectors and Prevention Specialists	19	17	-2	-10.53	0	1	1

\*Employment projections are from <http://www.ilworkinfo.com>

**Table 2: Continued**

National**		Employment		Employment Change		Average Yearly Job Openings		
SOC CODE	Occupational Title	2004 Number	2014 Number	2004 – 2014 Change	% Change	Due to New	Due to Replacements	Average Yearly Total***
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	55,862	67,652	11,790	21.1	N/A	N/A	3,000
33-2011	Fire Fighters	282,116	350,715	68,599	24.3	N/A	N/A	15,000
33-2021	Fire Inspectors and Investigators	12,912	12,200	-712	-5.5	N/A	N/A	0
33-2022	Forest Fire Inspectors and Prevention Specialists	1,653	1,602	-51	-3.1	N/A	N/A	0

\*\*Employment projections are from <http://www.bls.gov>

\*\*\*Estimate of average yearly job opening due to new jobs and net replacement needs.

**Table 3: Fire Science Technology Wage Data**

<b>Chicago PMSA*</b>							
<b>SOC CODE</b>	<b>Occupational Title</b>	<b>Entry Wage</b>		<b>Median Wage</b>		<b>Experienced Wage</b>	
		<b>Hourly</b>	<b>Annual</b>	<b>Hourly</b>	<b>Annual</b>	<b>Hourly</b>	<b>Annual</b>
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	\$27.56	\$57,321	\$38.64	\$80,359	\$41.64	\$86,595
33-2011	Fire Fighters	\$15.05	\$31,289	\$25.48	\$52,998	\$28.78	\$59,861
33-2021	Fire Inspectors and Investigators	\$15.53	\$32,305	\$26.26	\$54,618	\$30.47	\$63,371
33-2022	Forest Fire Inspectors and Prevention Specialists	\$19.69	\$40,969	\$31.33	\$65,177	\$34.14	\$71,000
<b>Cook County*</b>							
<b>SOC CODE</b>	<b>Occupational Title</b>	<b>Entry Wage</b>		<b>Median Wage</b>		<b>Experienced Wage</b>	
		<b>Hourly</b>	<b>Annual</b>	<b>Hourly</b>	<b>Annual</b>	<b>Hourly</b>	<b>Annual</b>
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	\$30.64	\$63,733	\$39.31	\$81,750	\$41.69	\$86,718
33-2011	Fire Fighters	\$19.96	\$41,524	\$29.34	\$61,031	\$31.53	\$65,599
33-2021	Fire Inspectors and Investigators	\$16.66	\$34,651	\$29.65	\$61,670	\$32.68	\$67,990
33-2022	Forest Fire Inspectors and Prevention Specialists	\$22.29	\$46,363	\$32.25	\$67,081	\$34.64	\$72,048
<b>DuPage County*</b>							
<b>SOC CODE</b>	<b>Occupational Title</b>	<b>Entry Wage</b>		<b>Median Wage</b>		<b>Experienced Wage</b>	
		<b>Hourly</b>	<b>Annual</b>	<b>Hourly</b>	<b>Hourly</b>	<b>Annual</b>	<b>Hourly</b>
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	\$28.26	\$58,777	\$36.98	\$76,912	\$42.29	\$87,956
33-2011	Fire Fighters	\$19.97	\$41,546	\$26.78	\$55,709	\$29.20	\$60,735
33-2021	Fire Inspectors and Investigators	\$21.56	\$44,837	\$26.85	\$55,829	\$29.15	\$60,644
33-2022	Forest Fire Inspectors and Prevention Specialists	N/A	N/A	N/A	N/A	N/A	N/A

\*State wage information from <http://www.ilworkinfo.com> (as of 1st quarter of 2006)



**Table 3: Continued**

<b>Lake County*</b>							
<b>SOC CODE</b>	<b>Occupational Title</b>	<b>Entry Wage</b>		<b>Median Wage</b>		<b>Experienced Wage</b>	
		<b>Hourly</b>	<b>Annual</b>	<b>Hourly</b>	<b>Hourly</b>	<b>Annual</b>	<b>Hourly</b>
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	\$31.65	\$65,835	\$35.00	\$72,806	\$40.24	\$83,703
33-2011	Fire Fighters	\$18.73	\$38,952	\$27.28	\$56,747	\$30.25	\$62,917
33-2021	Fire Inspectors and Investigators	N/A	N/A	N/A	N/A	N/A	N/A
33-2022	Forest Fire Inspectors and Prevention Specialists	N/A	N/A	N/A	N/A	N/A	N/A
<b>McHenry County*</b>							
<b>SOC CODE</b>	<b>Occupational Title</b>	<b>Entry Wage</b>		<b>Median Wage</b>		<b>Experienced Wage</b>	
		<b>Hourly</b>	<b>Annual</b>	<b>Hourly</b>	<b>Annual</b>	<b>Hourly</b>	<b>Annual</b>
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	\$16.62	\$34,577	\$33.74	\$70,189	\$38.60	\$80,297
33-2011	Fire Fighters	\$15.74	\$32,741	\$16.05	\$33,397	\$17.01	\$35,371
33-2021	Fire Inspectors and Investigators	\$15.82	\$32,894	\$16.58	\$34,485	\$21.08	\$43,837
33-2022	Forest Fire Inspectors and Prevention Specialists	N/A	N/A	N/A	N/A	N/A	N/A
<b>Statewide*</b>							
<b>SOC CODE</b>	<b>Occupational Title</b>	<b>Entry Wage</b>		<b>Median Wage</b>		<b>Experienced Wage</b>	
		<b>Hourly</b>	<b>Annual</b>	<b>Hourly</b>	<b>Hourly</b>	<b>Annual</b>	<b>Hourly</b>
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	\$21.64	\$45,011	\$36.74	\$76,435	\$40.30	\$83,832
33-2011	Fire Fighters	\$12.01	\$24,986	\$22.68	\$47,179	\$26.89	\$55,927
33-2021	Fire Inspectors and Investigators	\$17.29	\$35,969	\$26.43	\$54,970	\$30.10	\$62,613
33-2022	Forest Fire Inspectors and Prevention Specialists	\$19.04	\$39,606	\$31.09	\$64,664	\$34.04	\$70,799

\*State wage information from <http://www.ilworkinfo.com> (as of 1st quarter of 2006)

**Table 3: Continued**

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**National\*\***

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<b>SOC CODE</b>	<b>Occupational Title</b>	<b>Median Hourly</b>	<b>Mean Hourly</b>	<b>Mean Annual</b>	<b>Mean RSE***</b>
33-1021	First-Line Supervisors/Managers of Fire Fighting and Prevention Workers	\$30.24	\$31.27	\$65,030	1.2%
33-2011	Fire Fighters	\$19.80	\$20.37	\$42,370	1.0%
33-2021	Fire Inspectors and Investigators	\$23.10	\$24.02	\$49,950	1.0%
33-2022	Forest Fire Inspectors and Prevention Specialists	\$15.84	\$17.21	\$35,810	1.9%

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\*\*National wage information from <http://www.bls.gov> (as of May 2006)

\*\*\*RSE – Relative Standard Error