

Market Analysis for Electronics Engineering Technology

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

There are 16 local two-year colleges that compete with Harper College's Electronics Engineering 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: Electronics Engineering Technology Competitor Colleges (within 50 mile radius)

Major Competitor	Length of Program	Credit hour (\$)
Harry S. Truman College (City College of Chicago) – Chicago, IL	AAS – Electronics Engineering Technology, 71 credits. Advanced Certificate – Electronics Engineering Technology, 31 credits. Basic Certificate – Electronics Engineering Technology, 15 credits.	\$72/credit; \$180.83/credit (out-of-district)
Kennedy-King College (City College of Chicago) – Chicago, IL	AAS – Management/Marketing, 61 credits. Advanced Certificate – Management/Marketing, 34 credits. Basic Certificate – Computer Servicing Electronics Technology, 21 credits.	\$72/credit; \$180.83/credit (out-of-district)
Olive-Harvey College (City College of Chicago) – Chicago, IL	AAS – Computer Electronics Technology, 62 credits. Advanced Certificate – Computer Electronics Technology, 32 credits. Basic Certificate – Computer Electronics Technology, 16 credits.	\$72/credit; \$180.83/credit (out-of-district)
Richard J. Daley College (City College of Chicago) – Chicago, IL	AAS – Computer Servicing Electronics Technology, 63 credits. AAS – Electro-Mechanical-Industrial Electronics Technology, 60 credits. Advanced Certificate – Computer Servicing Electronics Technology, 41 credits. Advanced Certificate – Electro-Mechanical-Industrial Electronics Technology, 35 credits. Basic Certificate – Electro-Mechanical-Industrial Electronics Technology, 22 credits. Basic Certificate – Computer Servicing Electronics Technology, 19 credits.	\$72/credit; \$180.83/credit (out-of-district)

Table 1: Continued

College of DuPage – Glen Ellyn, IL	AAS – Electronics Engineering Technology, 71 credits. AAS – Computer and Internetworking Technologies, 67 credits. AS – Engineering Technology, 64 credits. Certificate – Computer and Internetworking Technologies, 44 credits. Certificate – Controls and Automation, 42 credits. Certificate – Electronics Technology, 42 credits. Certificate – Electronics Manufacturing, 32 credits. Certificate – Microcomputer Servicing Technician, 18 credits.	\$96/credit; \$223/credit (out-of-district)
College of Lake County – Grayslake, IL	AAS – Electronic Information Technology, 65 credits. AAS – Electronics Engineering Technology, 63-65 credits. AAS – Electronic Systems Technology, 60 credits. Certificate – Electronics Technology, 34 credits. Certificate – Electrical/Electronic Maintenance, 30-32 credits. Certificate – PC Technician, 14 credits.	\$80/credit; \$205/credit (out-of-district)
Elgin Community College ^a – Elgin, IL	AAS – IST/Maintenance Technology, 62-67 credits. Basic Certificate – Electrical Systems, 11 credits. Basic Certificate – Automated Electronic Systems, 9 credits.	\$84/credit; \$276.93/credit (out-of-district)
Joliet Junior College – Joliet, IL	AAS – Computer Engineering Technology Systems Option, 64 credits. AAS – Electrical/Electronic Automated Systems Technology, 64 credits. AAS – Electronics Engineering Technology, 64 credits. Certificate – Industrial Electrical/Electronics, 42 credits. Certificate – Electronics Engineering Technology, 34 credits. Certificate – Electrical/Electronics, 16 credits. Certificate – Basic Electronics, 8 credits.	\$73/credit; \$221.27/credit (out-of-district)
Kishwaukee College – Malta, IL	AAS – Electronics and Computer Technology, 63 credits. Certificate – Industrial Electricity, 30 credits. Certificate – Industrial Electronics/A+ Preparation and Controls, 30 credits.	\$72/credit; \$240.24/credit (out-of-district)

^a The Electronics Engineering Technology program at these colleges were discontinued in Fall 2006.

Table 1: Continued

McHenry Community College ^a – McHenry, IL	AAS – Electronics Engineering Technology, 61-62 credits. Certificate – Electronics Engineering Technology, 29 credits.	\$77/credit; \$276.93/credit (out-of-district)
Moraine Valley Community College – Palos Hills, IL	AAS – Electronic/Computer Controls Technician, 63 credits. Certificate – Electronic Controls Technician, 42 credits. Certificate – Electronics Technician, 18 credits.	\$72/credit; \$204/credit (out-of-district)
Oakton Community College – Des Plaines, IL	AAS – Electronics and Computer Technology, 60 credits. Certificate – Electronics Technology, 41 credits. Certificate – Electronics Computer Technician, 36 credits.	\$77.60/credit; \$227.60/credit (out-of-district)
Prairie State College – Chicago Heights, IL	Certificate – Computer Electronics Technician, 34-35 credits. Certificate – Computer Repair Specialist, 16 credits.	\$82/credit; \$239/credit (out-of-district)
South Suburban College – South Holland, IL	AAS – Electronics Engineering Technology, 62 credits. Basic Certificate – Electronics Engineering Technology, 25 credits. Basic Certificate – Basic Electricity, 13 credits. Basic Certificate – Digital Electronics, 11 credits.	\$87/credit; \$265/credit (out-of-district)
Triton College ^a – River Grove, IL	AAS – Electronics Technology/Computer Maintenance, 66 credits. AAS – Electronics Technology/Systems, 66 credits. Advanced Certificate – Computer Maintenance, 18 credits. Certificate – Electronics Technology, 25 credits.	\$61/credit; \$179.80/credit (out-of-district)
Waubonsee Community College – Sugar Grove, IL	AAS – Electronics Technology, 64 credits. Certificate – Advanced Electronics Technology, 30 credits. Certificate – Microcomputer Maintenance, 24 credits. Certificate – Basic Electronics Technology, 17 credits. Certificate – Electrical Maintenance, 10 credits. Certificate – Computer Servicing (A+), 8 credits.	\$70/credit; \$211.81/credit (out-of-district)

^a The Electronics Engineering Technology program at these colleges were discontinued in Fall 2006.

Table 2: Electronics Engineering Technology Employment Projections

Chicago PMSA*		Employment		Employment Change		Average Yearly Job Openings		
SOC CODE	Occupational Title	2002 Number	2012 Number	2002 – 2012		Due to New	Due to Replacements	Average Yearly Total
				Number	% Change			
17-2061	Computer Hardware Engineers	772	806	34	4.38	3	13	16
17-2071	Electrical Engineers	2,786	2,915	129	4.64	13	55	68
17-2072	Non-Computer Electronics Engineers	3,121	3,506	385	12.32	38	61	99
17-3012	Electrical and Electronics Drafters	934	891	-43	-4.62	-4	26	22
17-3023	Electrical and Electronic Engineering Technicians	4,316	4,832	516	11.94	52	90	142

Cook County*		Employment		Employment Change		Average Yearly Job Openings		
SOC CODE	Occupational Title	2002 Number	2012 Number	2002 – 2012		Due to New	Due to Replacements	Average Yearly Total
				Number	% Change			
17-2061	Computer Hardware Engineers	539	562	23	4.28	2	9	11
17-2071	Electrical Engineers	1,821	1,928	107	5.85	11	36	47
17-2072	Non-Computer Electronics Engineers	2,055	2,320	265	12.87	26	40	66
17-3012	Electrical and Electronics Drafters	582	562	-20	-3.46	-2	16	14
17-3023	Electrical and Electronic Engineering Technicians	2,825	3,204	379	13.41	38	59	97

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

Table 2: Continued

DuPage County*		Employment		Employment Change		Average Yearly Job Openings		
SOC CODE	Occupational Title	2002 Number	2012 Number	2002 – 2012 Number	% Change	Due to New	Due to Replacements	Average Yearly Total
17-2061	Computer Hardware Engineers	160	172	12	7.51	1	3	4
17-2071	Electrical Engineers	557	585	27	4.89	3	11	14
17-2072	Non-Computer Electronics Engineers	717	810	94	13.09	9	14	23
17-3012	Electrical and Electronics Drafters	188	177	-11	-5.80	-1	5	4
17-3023	Electrical and Electronic Engineering Technicians	925	1,026	100	10.84	10	19	29
Lake County*		Employment		Employment Change		Average Yearly Job Openings		
SOC CODE	Occupational Title	2002 Number	2012 Number	2002 – 2012 Number	% Change	Due to New	Due to Replacements	Average Yearly Total
17-2061	Computer Hardware Engineers	72	75	2	3.10	0	1	1
17-2071	Electrical Engineers	267	278	12	4.47	1	5	6
17-2072	Non-Computer Electronics Engineers	360	411	50	13.93	5	7	12
17-3012	Electrical and Electronics Drafters	98	97	-1	-1.36	0	3	3
17-3023	Electrical and Electronic Engineering Technicians	457	523	66	14.45	7	10	17

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

Table 2: Continued

McHenry County*		Employment		Employment Change		Average Yearly Job Openings		
SOC CODE	Occupational Title	2002 Number	2012 Number	2002 – 2012 Number	% Change	Due to New	Due to Replacements	Average Yearly Total
17-2061	Computer Hardware Engineers	15	15	0	0.00	0	0	0
17-2071	Electrical Engineers	95	94	0	0.00	0	2	2
17-2072	Non-Computer Electronics Engineers	67	74	8	11.27	1	1	2
17-3012	Electrical and Electronics Drafters	37	34	-2	-5.84	0	1	1
17-3023	Electrical and Electronic Engineering Technicians	122	133	11	8.98	1	3	4
Statewide*		Employment		Employment Change		Average Yearly Job Openings		
SOC CODE	Occupation Title	2002 Number	2012 Number	2002 – 2012 Number	% Change	Due to New	Due to Replacements	Average Yearly Total
17-2061	Computer Hardware Engineers	1,044	1,076	32	3.07	3	17	21
17-2071	Electrical Engineers	4,140	4,238	98	2.37	10	81	91
17-2072	Non-Computer Electronics Engineers	4,442	4,939	497	11.19	50	87	137
17-3012	Electrical and Electronics Drafters	1,441	1,359	-82	-5.69	0	41	41
17-3023	Electrical and Electronic Engineering Technicians	6,252	6,881	629	10.06	63	131	194

*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***
17-2061	Computer Hardware Engineers	76,511	84,255	7,744	10.1	N/A	N/A	2,000
17-2071	Electrical Engineers	155,904	174,279	18,375	11.8	N/A	N/A	5,000
17-2072	Non-Computer Electronics Engineers	142,864	156,732	13,868	9.7	N/A	N/A	4,000
17-3012	Electrical and Electronics Drafters	37,709	38,169	460	1.2	N/A	N/A	1,000
17-3023	Electrical and Electronic Engineering Technicians	181,636	199,366	17,730	9.8	N/A	N/A	6,000

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

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

Table 3: Electronics Engineering Technology Wage Data

Chicago PMSA*							
SOC CODE	Occupational Title	Entry Wage		Median Wage		Experienced Wage	
		Hourly	Annual	Hourly	Annual	Hourly	Annual
17-2061	Computer Hardware Engineers	\$22.82	\$47,459	\$32.89	\$68,404	\$40.62	\$84,478
17-2071	Electrical Engineers	\$24.18	\$50,297	\$34.26	\$71,264	\$40.52	\$84,287
17-2072	Non-Computer Electronics Engineers	\$22.76	\$47,361	\$33.34	\$69,337	\$39.41	\$81,978
17-3012	Electrical and Electronics Drafters	\$13.64	\$28,380	\$19.18	\$39,902	\$22.69	\$47,207
17-3023	Electrical and Electronic Engineering Technicians	\$15.53	\$32,297	\$22.12	\$46,005	\$26.66	\$55,473
Cook County*							
SOC CODE	Occupational Title	Entry Wage		Median Wage		Experienced Wage	
		Hourly	Annual	Hourly	Annual	Hourly	Annual
17-2061	Computer Hardware Engineers	\$25.48	\$53,010	\$36.00	\$74,885	\$41.95	\$87,260
17-2071	Electrical Engineers	\$25.54	\$53,104	\$35.87	\$74,618	\$41.70	\$86,734
17-2072	Non-Computer Electronics Engineers	\$22.88	\$47,575	\$30.38	\$63,182	\$36.57	\$76,070
17-3012	Electrical and Electronics Drafters	\$11.33	\$23,574	\$16.81	\$34,975	\$19.71	\$40,982
17-3023	Electrical and Electronic Engineering Technicians	\$16.23	\$33,745	\$23.01	\$47,859	\$26.23	\$54,556

*State wage information from <http://www.ilworkinfo.com> (as of 1st quarter of 2005 for Chicago and Illinois and 2nd quarter of 2004 for collar counties)

Table 3: Continued

DuPage County*							
SOC CODE	Occupational Title	Entry Wage		Median Wage		Experienced Wage	
		Hourly	Annual	Hourly	Hourly	Annual	Hourly
17-2061	Computer Hardware Engineers	\$21.80	\$45,353	\$31.86	\$66,266	\$39.47	\$82,087
17-2071	Electrical Engineers	\$24.08	\$50,091	\$33.96	\$70,637	\$40.50	\$84,244
17-2072	Non-Computer Electronics Engineers	\$24.84	\$51,658	\$31.34	\$65,198	\$36.11	\$75,098
17-3012	Electrical and Electronics Drafters	\$15.85	\$32,960	\$22.91	\$47,638	\$28.27	\$58,790
17-3023	Electrical and Electronic Engineering Technicians	\$14.08	\$29,282	\$22.02	\$45,801	\$27.48	\$57,144
Lake County*							
SOC CODE	Occupational Title	Entry Wage		Median Wage		Experienced Wage	
		Hourly	Annual	Hourly	Hourly	Annual	Hourly
17-2061	Computer Hardware Engineers	\$27.77	\$57,753	\$38.94	\$80,992	\$42.79	\$88,988
17-2071	Electrical Engineers	\$21.78	\$45,292	\$34.08	\$70,899	\$41.04	\$85,360
17-2072	Non-Computer Electronics Engineers	\$22.12	\$46,025	\$40.16	\$83,520	\$48.11	\$100,072
17-3012	Electrical and Electronics Drafters	\$8.37	\$17,402	\$17.08	\$35,532	\$20.03	\$41,660
17-3023	Electrical and Electronic Engineering Technicians	\$12.87	\$26,770	\$17.78	\$36,989	\$22.00	\$45,760

*State wage information from <http://www.ilworkinfo.com> (as of 1st quarter of 2005 for Chicago and Illinois and 2nd quarter of 2004 for collar counties)

Table 3: Continued**McHenry County***

SOC CODE	Occupational Title	Entry Wage		Median Wage		Experienced Wage	
		Hourly	Annual	Hourly	Annual	Hourly	Annual
17-2061	Computer Hardware Engineers	N/A	N/A	N/A	N/A	N/A	N/A
17-2071	Electrical Engineers	\$18.06	\$37,577	\$26.34	\$54,792	\$32.31	\$67,195
17-2072	Non-Computer Electronics Engineers	N/A	N/A	N/A	N/A	N/A	N/A
17-3012	Electrical and Electronics Drafters	N/A	N/A	N/A	N/A	N/A	N/A
17-3023	Electrical and Electronic Engineering Technicians	\$14.94	\$31,061	\$19.91	\$41,413	\$24.72	\$51,417

Statewide*

SOC CODE	Occupational Title	Entry Wage		Median Wage		Experienced Wage	
		Hourly	Annual	Hourly	Hourly	Annual	Hourly
17-2061	Computer Hardware Engineers	\$21.49	\$44,687	\$33.17	\$69,001	\$39.91	\$83,017
17-2071	Electrical Engineers	\$24.12	\$50,170	\$33.90	\$70,512	\$40.26	\$83,737
17-2072	Non-Computer Electronics Engineers	\$23.21	\$48,262	\$33.53	\$69,753	\$40.21	\$83,623
17-3012	Electrical and Electronics Drafters	\$14.05	\$29,232	\$20.35	\$42,329	\$24.29	\$50,532
17-3023	Electrical and Electronic Engineering Technicians	\$15.19	\$31,605	\$21.66	\$45,061	\$26.27	\$54,635

*State wage information from <http://www.ilworkinfo.com> (as of 1st quarter of 2005 for Chicago and Illinois and 2nd quarter of 2004 for collar counties)

Table 3: Continued

National**

SOC CODE	Occupational Title	Median Hourly	Mean Hourly	Mean Annual	Mean RSE***
17-2061	Computer Hardware Engineers	\$40.59	\$41.91	\$87,170	0.9%
17-2071	Electrical Engineers	\$35.34	\$36.57	\$76,060	0.5%
17-2072	Non-Computer Electronics Engineers	\$37.52	\$38.46	\$79,990	0.6%
17-3012	Electrical and Electronics Drafters	\$21.90	\$23.27	\$48,410	0.8%
17-3023	Electrical and Electronic Engineering Technicians	\$23.10	\$23.42	\$48,710	0.4%

**National wage information from <http://www.bls.gov> (as of May 2005)

***RSE – Relative Standard Error