



AACC-RB-04-1

RESEARCH BRIEF

# Hot Programs at Community Colleges

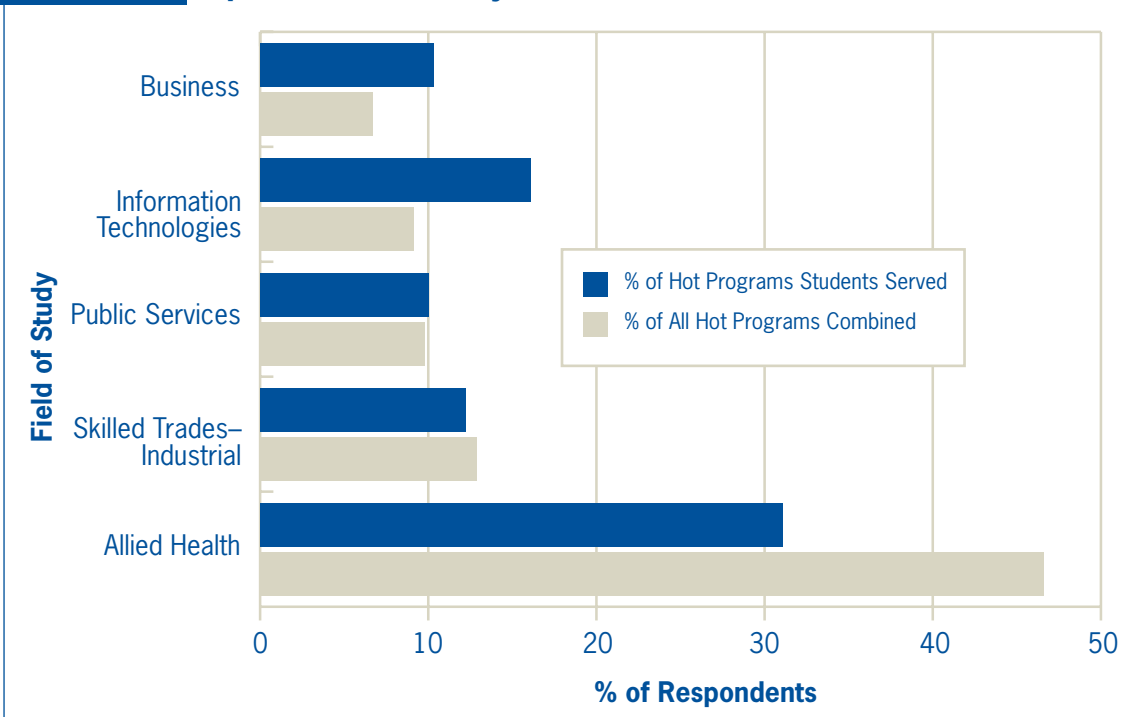
By Sara McPhee

## EXECUTIVE SUMMARY

The American Association of Community Colleges (AACC) periodically conducts a survey of community colleges to identify hot programs. Hot programs are defined as those for which there is a large market demand for graduating students. Highlights from the 2004 Hot Programs and Homeland Security Survey include the following:

- Allied health programs were the most frequently identified hot programs across the nation, representing 46.6% of all hot programs.
- Among allied health programs, registered nursing was the most prevalent, constituting 19.6% of all hot programs.
- Allied health programs also were the most frequently added programs in recent years at 26.2%, and industrial skilled trades were the most frequently discontinued programs, also at 26.3%.
- Approximately 65% of respondents indicated that they had in some way reviewed or modified their curriculum in response to increased homeland security training needs.

**FIGURE 1** Top 5 Fields of Study



## Background and Methodology

This report outlines the findings from the fourth hot programs survey conducted by AACC. Most of the questions asked in the survey matched the questions from previous iterations, but some new questions were added. For instance, the 2004 survey included new questions about the growing need for homeland security courses and programs.

AACC sent the survey to chief academic officers at more than 1,100 community colleges: 344 colleges responded, for a 31% response rate. Responding colleges were compared to nonresponding colleges with regard to enrollments, region, and level of urbanicity to determine whether a response bias existed based on those factors. The analysis showed no statistically significant differences between the respondents and nonrespondents based on those factors. However, readers are cautioned against viewing starting salaries and enrollments as representative of any definitive national trends, because most of the respondents estimated enrollment numbers, and it is not possible to determine whether starting salaries reported

reflect the salaries of hot programs graduates just entering the workforce or those who may have been working for some time.

For purposes of analysis, the specific hot programs that colleges reported were categorized into 85 program areas identified by AACC. Similar programs were then grouped into broader fields of study. Appendixes A, B, and C list the fields of study and their programs; for-credit and noncredit programs are listed in Appendixes A and B, and all programs combined are listed in Appendix C.

## Overview of All Programs Combined

The most striking finding of the 2004 survey was that programs in the allied health field of study, registered nursing in particular, were by far the hottest programs at community colleges across the country: 46.6% of all hot programs were in the allied health field. This trend mirrors the current workforce needs in this country: The Bureau of Labor Statistics has predicted that 6 of the 10

**TABLE 1 Top 15 Hot Programs, For-Credit and Noncredit Combined**

Program	% of Programs	Average Starting Salary	Average # of Students
1. Registered Nursing	19.6%	\$38,419	170
2. Law Enforcement	5.7%	\$31,865	179
3. Licensed Practical Nursing	5.1%	\$27,507	98
4. Radiology	4.6%	\$35,612	72
5. Computer Technologies	3.7%	\$35,469	778
6. Automotive	3.5%	\$32,498	162
7. Nursing Assistant	3.1%	\$16,754	140
8. Dental Hygiene	2.9%	\$35,956	59
9. Health Information Technology	2.6%	\$26,578	54
10. Construction	2.5%	\$34,414	223
11. Education	2.4%	\$30,810	297
12. Business	2.2%	\$31,366	506
13. Networking	2.1%	\$35,938	64
14. Electronics	1.7%	\$32,734	58
15. Medical Assistant	1.7%	\$22,953	121

fastest-growing occupations between 2002 and 2012 will be allied health occupations (Bureau of Labor Statistics, 2004b). Figure 1 (see page 1) shows the top five fields of study reported and the percentage of hot programs students served.

When looking at the responses for the allied health field of study more closely, it became apparent that the high percentage of registered nursing programs was driving this trend. Registered nursing was both the hottest for-credit program and the hottest of all programs combined. Even more striking was the difference in the percentage of registered nursing programs compared with all other hot programs. As can be seen in Table 1, registered nursing programs represented nearly 20% of all hot programs, whereas the second-hottest program, law enforcement, represented less than 6% of all hot programs. Registered nursing programs also served the most students: 16% of the students enrolled in hot programs were from nursing programs. Computer technologies was second, serving 13% of students.

Table 2 shows the regional variation in hot programs reported. Following the national trend,

registered nursing was by far the hottest program in all regions, and no other program appeared as hot across regions as consistently as nursing did. Law enforcement was a hot program in five of the eight regions, and licensed practical nursing and radiology were hot in three regions. Other than law enforcement, all of the programs that appeared in more than one region were in the allied health field of study.

The hottest programs identified in the 2000 hot programs survey (Nock & Shults, 2001) were in information technologies, which also had some of the highest salaries. That survey was administered during the height of the Internet boom when people working in computer-related fields commanded increasingly higher salaries. Jobs in the allied health field, particularly registered nursing, typically do not garner high salaries like those in the information technologies. Table 3 shows the hot programs with the highest average starting salaries. Only registered nursing was also among the top 15 hot programs list (see Table 1). Although registered nursing was the hottest program, it was only seventh highest by starting salary.

**TABLE 2 Hottest Programs by Region, For-Credit and Noncredit Combined**

Region	% of Programs in Region	Region	% of Programs in Region
<b>New England</b>		<b>South</b>	
Registered Nursing	16.4%	Registered Nursing	18.4%
Law Enforcement	11.0%	Computer Technologies	4.8%
Health Information Technology	5.5%	Law Enforcement	4.8%
<b>Mid East</b>		Radiology	4.8%
Registered Nursing	22.7%	<b>Southwest</b>	
Education	7.0%	Registered Nursing	18.8%
Radiology	5.5%	Law Enforcement	6.9%
<b>Great Lakes</b>		Licensed Practical Nursing	5.6%
Registered Nursing	21.5%	<b>Rocky Mountains</b>	
Radiology	7.3%	Registered Nursing	23.4%
Licensed Practical Nursing	6.2%	English as a Second Language	8.5%
<b>Plains</b>		<b>Far West</b>	
Registered Nursing	18.6%	Registered Nursing	21.6%
Licensed Practical Nursing	8.8%	Automotive	7.2%
Law Enforcement	7.1%	Law Enforcement	5.8%

The overall average starting salary for all hot programs graduates was \$32,376; however, the salaries reported varied widely, and in many instances colleges did not provide starting salary information. Possible reasons for the wide variation in salaries reported include regional salary differences, lack of differentiation between experienced workers and those just entering the workforce, and reporting errors.

## Comparison of For-Credit and Noncredit Programs

Community colleges offer a broad range of programs in order to meet the needs of their local communities, businesses, and students. Unlike most four-year institutions, community colleges tend to offer a wide variety of noncredit as well as for-credit courses. Often noncredit courses are developed to meet the shorter-term training needs of local business and industry; nonetheless, there may be considerable overlap between for-credit and noncredit offerings, even at the same institution. College and state policies vary widely, and what may be a credit program in one state may be a noncredit program in another. However, some programs do still exist that are predominantly for credit, such as registered nursing, and some are predominantly noncredit, such as real estate. Therefore, in analyzing hot pro-

grams, it is important to look at for-credit and non-credit programs separately as well.

In analyzing the 2004 survey findings, it was apparent that the allied health programs were far more likely to be offered for credit: 54.1% of for-credit hot programs were in allied health, whereas only 25.6% of noncredit programs were in allied health. Conversely, the industrial skilled trades, business, and public services programs were more prevalent among noncredit hot programs than they were among for-credit programs (see Appendixes A and B).

In addition, when comparing for-credit hot programs in 2000 versus 2004, it is interesting to note the reversal in emphasis on the information technologies versus the allied health field. In 2000, 5 of the top 15 for-credit hot programs were in information technologies, and 4 were in allied health (Nock & Shults, 2001). In contrast, in 2004, only 2 of the top 15 programs were in information technologies, and 7 were in allied health (see Table 4). The pattern for noncredit programs was similar, although not as striking. In 2000, the three hottest noncredit programs were in the information technologies field (Nock & Shults, 2001), but in 2004 the top noncredit program was nursing assistant. The first information technologies program to appear on the list was computer technologies at sixth place.

**TABLE 3** Top 10 For-Credit and Noncredit Hot Programs, by Starting Salary

Program	SALARY		
	Starting	Minimum	Maximum
1. Computer Programming	\$48,500	\$32,000	\$65,000
2. Manufacturing	\$40,178	\$22,000	\$65,000
3. Cardiovascular Technology	\$40,000	\$40,000	\$40,000
4. Homeland Security	\$40,000	\$35,000	\$45,000
5. Cybersecurity	\$38,625	\$35,000	\$50,000
6. Engineering	\$38,451	\$29,000	\$55,000
7. Registered Nursing	\$38,419	\$18,000	\$72,000
8. Real Estate	\$38,093	\$20,000	\$60,000
9. Occupational Therapy Assistant	\$38,000	\$38,000	\$38,000
10. Mortuary Science	\$36,666	\$30,000	\$45,000

Starting salaries tended to be higher for graduates of for-credit programs than for those of non-credit programs. The average starting salary reported for graduates of for-credit hot programs was \$33,304; the average for noncredit program graduates was \$29,177. Although state policies may make the distinction between for-credit and non-credit programs seem arbitrary at times, it does appear that some of the lower-paying occupations are those held by graduates of noncredit programs, and higher-paying occupations are held by graduates of for-credit programs. For example, registered nursing was a for-credit program and was among the highest-paying hot programs in the survey: The average starting salary reported was \$38,419. Nursing assistant programs were mostly noncredit, and assistants graduating from noncredit programs were among the lowest paid, with an average starting salary of \$17,238.

Conversely, the average number of students per hot program was higher for the noncredit programs than for the for-credit programs at 373 and 149 students respectively. A possible reason for this is that

noncredit programs tend to be shorter and therefore less of a commitment. For example, students with an interest in nursing may enroll in a noncredit nursing assistant program to determine whether they have enough interest to pursue the longer and more intensive registered nursing program. Another reason why enrollment in noncredit programs seems higher is that the shorter duration of the noncredit programs may simply mean that colleges can educate more students in these programs as compared with the longer for-credit programs.

## Changes to Programmatic Offerings

Respondents were asked to identify programs that had been added in the past three years to meet the needs of local business and industries. In addition, respondents were asked about any programs that had to be discontinued in the past three years and why they were discontinued. Further reflecting the emphasis on allied health, programs in the allied health field were the most frequently added,

**TABLE 4** Average Starting Salaries and Numbers of Students for the Top 15 For-Credit Programs

Program	% of For-Credit Programs	Average Starting Salary	Average # of Students
1. Registered Nursing	26.0%	\$38,419	173
2. Licensed Practical Nursing	6.8%	\$27,548	100
3. Radiology	6.2%	\$35,623	73
4. Law Enforcement	5.8%	\$32,949	143
5. Automotive	4.1%	\$32,733	73
6. Computer Technologies	3.8%	\$34,647	437
7. Dental Hygiene	3.6%	\$36,891	60
8. Education	2.2%	\$31,462	343
9. Health Information Technology	2.2%	\$27,481	47
10. Electronics	2.1%	\$32,764	43
11. Business	2.0%	\$29,247	637
12. Medical Lab Technician	1.8%	\$33,299	39
13. Computer Networking	1.7%	\$33,039	69
14. Culinary Arts	1.6%	\$27,961	140
15. Medical Assistant	1.5%	\$23,983	107

followed by programs in information technologies and industrial skilled trades (see Table 5). The industrial skilled trades and engineering technology were the fields most frequently discontinuing programs (see Table 6).

The allied health field ranked first for adding the most programs and third for discontinuing the most programs. A closer examination of responses within the allied health field of study reveals that the programs that colleges were adding differ greatly from those that were being discontinued. Registered nursing, health information technology, radiology, and nursing assistant programs were among those most frequently added in the past three years.

Among those allied health programs that were discontinued, physical therapy assistant, general allied health, occupational therapy assistant, and surgical technology were the most frequently discontinued. With the exception of allied health programs, all of the commonly discontinued programs were highly specialized and thus may not be attracting students at the community college level. Conversely, the programs that tend to be added for the most part have a broad range of applications after a student graduates. However, given the relatively small number of respondents to this question, it is most likely that this is not indicative of a

national trend. The Bureau of Labor Statistics (2004a) predicts that occupational and physical therapy assistant positions will grow much faster than average, which makes these programs appear to be anomalies rather than the trend.

A similar situation exists for the industrial skilled trades. Programs in this field were among the most commonly added and the most commonly discontinued. Further examination of the field did not yield as clear a picture as did allied health, however. The top three programs within the skilled trades to be added were construction, agriculture, and manufacturing, and the programs most commonly discontinued were manufacturing and agriculture. For the most part, the explanation for this may be regional differences. The fact that programs can be among the most frequently added and discontinued within the same survey demonstrates the way in which community colleges respond to the needs of local communities. As a manufacturing plant in one community closes down, a manufacturing plant may be opening in another community. The residents in the first community no longer need their community college to offer a manufacturing program, whereas the company opening the plant in the second community wants the local college to open a program as soon as possible.

**TABLE 5** Fields of Study Most Frequently Adding Programs, For-Credit and Noncredit Combined

Field of Study	% Adding Programs
Allied Health	26.2%
Information Technologies	17.0%
Skilled Trades—Industrial	14.7%
Public Services	11.0%
Business	9.2%
Engineering Technology	7.5%
Education	5.1%
Skilled Trades—Services	3.7%
Language	2.8%
Sciences	1.8%
Miscellaneous	1.0%

**TABLE 6** Fields of Study Most Frequently Discontinuing Programs, For-Credit and Noncredit Combined

Field of Study	% Discontinuing Programs
Skilled Trades—Industrial	26.3%
Engineering Technology	13.3%
Allied Health	13.0%
Business	11.8%
Information Technologies	11.5%
Skilled Trades—Services	10.0%
Public Services	5.0%
Sciences	4.7%
Miscellaneous	1.8%
Education	1.5%
Languages	1.2%

**TABLE 7** The 10 Occupations With the Largest Job Growth Predicted

Occupation	# of Jobs		Change, 2002–2012	
	2002	2012	#	%
Registered Nurses	2,284	2,908	623	27%
Postsecondary Teachers	1,581	2,184	603	38%
Retail Salespeople	4,076	4,672	596	15%
Customer Service Representatives	1,894	2,354	460	24%
Food Prep and Food Services Workers	1,990	2,444	454	23%
Cashiers (except in gaming)	3,432	3,886	454	13%
Janitors and Cleaners	2,267	2,681	414	18%
General and Operations Managers	2,049	2,425	376	18%
Waiters and Waitresses	2,097	2,464	367	18%
Nursing Aides	1,375	1,718	343	25%

Note. Data are from U.S. Bureau of Labor Statistics (2004c).

The main reason for discontinuing programs was low enrollment (i.e., lack of interest in the program). In light of budget constraints at many colleges across the nation, college administrators may have to close programs with low enrollments more quickly than they would have in the past. The second most common reason cited was lack of need from local business and industry. In many cases, these two reasons are likely to be closely linked, because if students cannot obtain employment after finishing their program at the local community college they are unlikely to even enroll.

## Future Trends

**F**indings from the 2004 survey clearly demonstrate that the allied health field in general, and registered nursing programs in particular, were hot at community colleges around the nation. Graduates from these programs were in high demand, and registered nursing graduates were reported to make a relatively high starting salary compared to graduates from other hot programs. When the 2000 survey was conducted, programs in the information technologies were the hottest programs, and few predicted the dramatic shift in the U.S. economy that would change that. The Bureau of Labor Statistics predicted that computer engineers, computer support specialists, systems ana-

lysts, and database administrators would be among the 10 occupations with the fastest projected employment growth between 1998 and 2008 (Nock & Shults, 2001). With the dot.com bubble burst, it became apparent just how difficult it can be to predict where the U.S. economy and jobs will be in the future.

According to Bureau of Labor Statistics projections for 2002 to 2012, the services-providing industries are expected to outpace the goods-producing industries (Bureau of Labor Statistics, 2004a). The education and health services sector is expected to add more jobs than any other industry sector. Health-care jobs, in particular, are expected to grow by 32%. This growth is driven mainly by the aging U.S. population coupled with increasing life expectancies. This trend suggests that the allied health field of study at community colleges should remain hot for a long time to come. The 10 occupations with the largest job growth predicted can be found in Table 7.

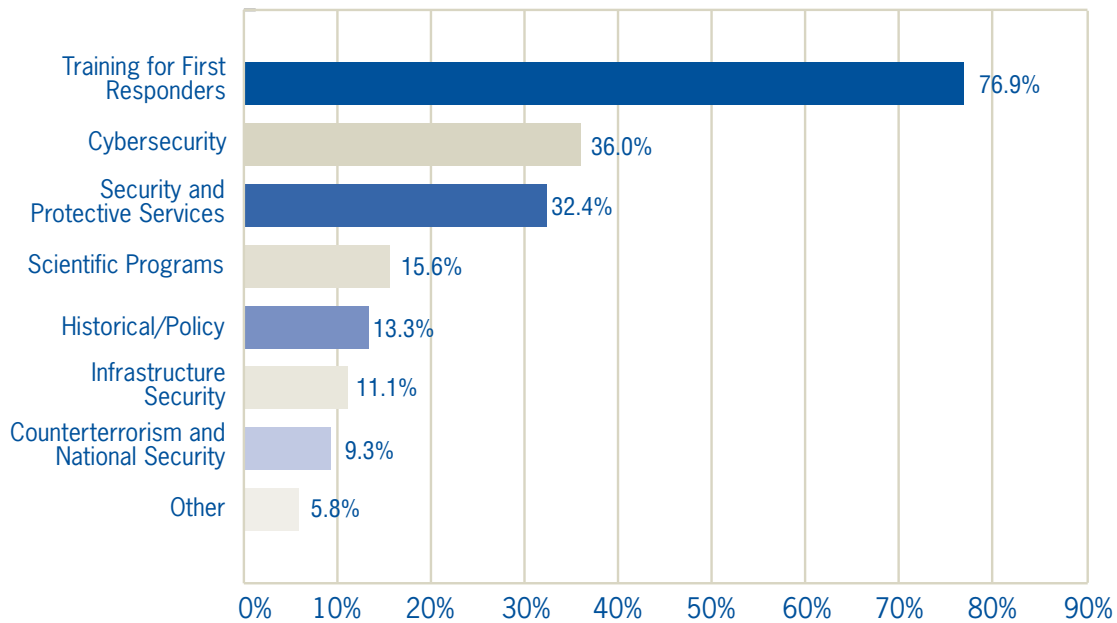
Respondents to the 2004 survey were asked to forecast what programs will be hot in the future. They were asked what cutting-edge or innovative programs had been added recently—programs that college administrators believe are going to be hot in the future. The top responses to this question reveal that college administrators believe that biomedical engineering technologies and programs

**TABLE 8** Cutting-Edge Programs Added by Community Colleges

Program	% of Colleges
Biomedical Engineering/Biological Technology	12.8%
Homeland Security	11.9%
Internet Technologies	4.9%
Computer Networking	4.9%
Law Enforcement	4.6%
Multimedia	4.6%
Computer Technologies	3.6%
Geographic Information Systems	3.6%
Graphic Design	3.3%
Manufacturing	3.3%



**FIGURE 2** Areas of Focus for Homeland Security Programs at Community Colleges



related to homeland security are the programs that they need to invest in to be prepared for the future (see Table 8).

Respondents were also asked more specifically about whether or not their colleges had made curriculum changes based on increased homeland security needs: 65.4% of the respondents indicated that they had reviewed or in some way modified their curriculum. Of those 65.4%, 50% had added courses, and 20% had added entirely new programs to meet local homeland security training needs. Of those colleges that had done any review or modification of their curricula, the most common areas of focus within homeland security were training for first responders, cybersecurity, and security and protective services (see Figure 2).

## Conclusion

**R**esults of the 2004 hot programs survey demonstrate that activities at community colleges mirror the needs of the economy as a whole. The nation is experiencing a shortage of nursing and allied health

workers, and community colleges are responding to these challenges. Allied health programs, particularly nursing, are hot at community colleges across the nation. As the demand for allied health workers has increased, these programs have become more prevalent in the hot programs survey. In previous years, programs in the information technologies field were among the hottest programs at community colleges, and during that time the economy had an almost limitless need for workers in that field. Now those programs have been eclipsed by the allied health programs. Additionally, in light of new political realities, college administrators are responding to the needs for an adequate supply of workers in homeland security fields. The results of this survey demonstrate that community colleges are prepared to face the education and training challenges of the changing U.S. economy. **FB**

## APPENDIX A For-Credit Hot Programs by Field of Study

Field of Study	Program	% of For-Credit Programs	% of Field of Study
<b>Allied Health</b>		<b>54.1%</b>	
	Registered Nursing	26.0%	48.0%
	Licensed Practical Nursing	6.8%	12.6%
	Radiology	6.2%	11.4%
	Dental Hygiene	3.6%	6.6%
	Health Information Technology	2.2%	4.1%
	Medical Lab Technician	1.8%	3.3%
	Medical Assistant	1.5%	2.7%
	Respiratory Therapy	1.3%	2.5%
	Physical Therapy Assistant	1.0%	1.9%
	Surgical Technology	1.0%	1.9%
	Allied Health	0.9%	1.7%
	Veterinary Technology	0.4%	0.8%
	Nursing Assistant	0.3%	0.6%
	Mental Health	0.2%	0.4%
	Cardiovascular Technology	0.1%	0.2%
	Auditory Health Care	0.1%	0.2%
	Nuclear Medicine Technician	0.1%	0.2%
	Optical Health Care	0.1%	0.2%
	Occupational Therapy	0.1%	0.2%
	Pharmacy Technician	0.1%	0.2%
	Therapeutic Massage	0.1%	0.2%
<b>Skilled Trades—Industrial</b>		<b>10.5%</b>	
	Automotive	4.1%	39.4%
	Construction	1.2%	11.7%
	Welding	0.9%	8.5%
	Manufacturing	0.8%	7.4%
	Trucking	0.8%	7.4%
	Refrigeration/AC/Heating	0.7%	6.4%
	Agriculture	0.3%	3.2%
	Aviation Maintenance	0.3%	3.2%
	Industrial Technology	0.3%	3.2%
	Computer Aided Drafting	0.2%	2.1%
	Drafting	0.2%	2.1%
	Industrial Maintenance	0.2%	2.1%
	Machinist/Machine Tool Technology	0.2%	2.1%
	Aviation	0.1%	1.1%
<b>Information Technologies</b>		<b>8.6%</b>	
	Computer Technologies	3.8%	44.2%
	Networking	1.7%	19.5%
	Multimedia	1.0%	11.7%
	Graphic Design/Animation	0.8%	9.1%
	Cybersecurity	0.7%	7.8%
	Telecommunications	0.3%	3.9%
	Computer Software	0.2%	2.6%
	Internet Technology	0.1%	1.3%

**APPENDIX A For-Credit Hot Programs by Field of Study (cont'd)**

Field of Study	Program	% of For-Credit Programs	% of Field of Study
<b>Public Services</b>		<b>8.5%</b>	
	Law Enforcement	5.8%	68.4%
	Emergency Medical Services	1.0%	11.8%
	Social Services/Work	0.9%	10.5%
	Fire Science	0.4%	5.3%
	Homeland Security	0.3%	3.9%
<b>Engineering Technology</b>		<b>4.7%</b>	
	Electric/Electrical Engineering	2.1%	45.2%
	Geographic Information Systems	0.8%	16.7%
	Biomedical Engineering	0.7%	14.3%
	Engineering	0.6%	11.9%
	Fuel Technology	0.2%	4.8%
	Chemical Technology/Engineering	0.1%	2.4%
	Plastics Technology/Engineering	0.1%	2.4%
	Quality Technology	0.1%	2.4%
<b>Business</b>		<b>4.3%</b>	
	Business	2.0%	47.4%
	Paralegal	0.8%	18.4%
	Accounting	0.7%	15.8%
	Office Support	0.7%	15.8%
	Real Estate	0.1%	2.6%
<b>Education</b>		<b>3.6%</b>	
	Education	2.2%	62.5%
	Early Childhood Development	1.3%	37.5%
<b>Skilled Trades—Services</b>		<b>3.6%</b>	
	Culinary Arts	1.6%	43.8%
	Cosmetology	1.0%	28.1%
	Mortuary Science	0.3%	9.4%
	Golf Course Supervision	0.3%	9.4%
	Fashion/Interior/Floral Design	0.2%	6.3%
	Hospitality/Travel/Tourism	0.1%	3.1%
<b>Sciences</b>		<b>1.2%</b>	
	Environmental Science	1.1%	90.9%
	Aquarium Science	0.1%	9.1%
<b>Miscellaneous</b>		<b>0.6%</b>	
	Liberal Arts/General Studies	0.4%	80.0%
	Multidisciplinary	0.1%	20.0%
<b>Languages</b>		<b>0.3%</b>	
	Interpretation-ASL	0.2%	66.7%
	English as a Second Language	0.1%	33.3%

**APPENDIX B Noncredit Hot Programs by Field of Study**

Field of Study	Program	% of Noncredit Programs	% of Field of Study
<b>Allied Health</b>		<b>25.6%</b>	
	Nursing Assistant	10.7%	42.0%
	Health Information Technology	3.5%	13.6%
	Allied Health	2.8%	11.1%
	Medical Assistant	2.2%	8.6%
	Registered Nursing	1.6%	6.2%
	Phlebotomy	0.9%	3.7%
	Dental Hygiene	0.9%	3.7%
	Pharmacy Technician	0.9%	3.7%
	Therapeutic Massage	0.6%	2.5%
	Licensed Practical Nursing	0.3%	1.2%
	Medical Lab Technician	0.3%	1.2%
	Radiology	0.3%	1.2%
	Surgical Technology	0.3%	1.2%
<b>Skilled Trades—Industrial</b>		<b>19.6%</b>	
	Construction	6.0%	30.6%
	Trucking/Transportation	4.1%	21.0%
	Automotive	1.6%	8.1%
	Industrial Maintenance	1.6%	8.1%
	Agriculture	1.3%	6.5%
	Manufacturing	1.3%	6.5%
	Refrigeration/AC/Heating	1.3%	6.5%
	Welding	1.3%	6.5%
	Aviation Maintenance	0.3%	1.6%
	Facilities Maintenance	0.3%	1.6%
	Industrial Technology	0.3%	1.6%
	Machinist/Machine Tool Technology	0.3%	1.6%
<b>Business</b>		<b>13.6%</b>	
	Real Estate	4.7%	34.9%
	Business	2.8%	20.9%
	Office support	1.6%	11.6%
	Insurance	1.3%	9.3%
	Accounting	0.6%	4.7%
	Grant Writing	0.6%	4.7%
	Paralegal	0.6%	4.7%
	Supervisor/Leadership Training	0.6%	4.7%
	Human Resources	0.3%	2.3%
	Total Quality Management	0.3%	2.3%
<b>Public Services</b>		<b>13.2%</b>	
	Law Enforcement	5.4%	40.5%
	Fire Science	3.5%	26.2%
	Emergency Medical Services	2.8%	21.4%
	Social Work/Services	1.6%	11.9%
<b>Information Technologies</b>		<b>10.4%</b>	
	Computer Technologies	3.5%	33.3%
	Networking	3.5%	33.3%

## APPENDIX B Noncredit Hot Programs by Field of Study (cont'd)

Field of Study	Program	% of Noncredit Programs	% of Field of Study
	Computer Software	1.3%	12.1%
	Internet Technologies	0.6%	6.1%
	Programming	0.6%	6.1%
	Cybersecurity	0.6%	6.1%
	Multimedia	0.3%	3.0%
<b>Languages</b>		<b>4.7%</b>	
	English as a Second Language	3.2%	66.7%
	Spanish	1.6%	33.3%
<b>Education</b>		<b>4.1%</b>	
	Education	2.8%	69.2%
	Early Childhood Development	1.3%	30.8%
<b>Skilled Trades—Services</b>		<b>4.1%</b>	
	Hospitality/Travel/Tourism	2.2%	53.8%
	Culinary Arts	0.6%	15.4%
	Fashion/Interior/Floral Design	0.6%	14.4%
	Cosmetology	0.3%	7.7%
	Golf Course Supervision	0.3%	7.7%
<b>Engineering Technology</b>		<b>2.5%</b>	
	Safety Engineering Technology	1.3%	50.0%
	Electrical Engineering	0.6%	25.0%
	Biomedical Engineering	0.3%	12.5%
	Fuel Technology	0.3%	12.5%
<b>Sciences</b>		<b>1.6%</b>	
	Environmental Services	1.6%	100.0%
<b>Miscellaneous</b>		<b>0.6%</b>	
	Multidisciplinary	0.6%	100.0%

## APPENDIX C For-Credit and Noncredit Hot Programs Combined

Field of Study	Program	% of Combined Programs	% of Field of Study
<b>Allied Health</b>		<b>46.6%</b>	
	Registered Nursing	19.6%	42.0%
	Licensed Practical Nursing	5.1%	11.0%
	Radiology	4.6%	9.9%
	Nursing Assistant	3.1%	6.6%
	Dental Hygiene	2.9%	6.2%
	Health Information Technology	2.6%	5.5%
	Medical Assistant	1.7%	3.5%
	Allied Health	1.4%	3.0%
	Medical Lab Technician	1.4%	3.0%

**APPENDIX C For-Credit and Noncredit Hot Programs Combined (cont'd)**

Field of Study	Program	% of Combined Programs	% of Field of Study
	Respiratory Therapy	1.0%	2.1%
	Surgical Technology	0.8%	1.8%
	Physical Therapy Assistant	0.7%	1.6%
	Pharmacy Technology	0.3%	0.7%
	Veterinary Technology	0.3%	0.7%
	Phlebotomy	0.2%	0.5%
	Therapeutic Massage	0.2%	0.5%
	Mental Health	0.2%	0.4%
	Cardiovascular Technology	0.1%	0.2%
	Hearing Health Care	0.1%	0.2%
	Nuclear Medicine Technician	0.1%	0.2%
	Optical	0.1%	0.2%
	Occupational Therapy Assistant	0.1%	0.2%
<b>Skilled Trades—Industrial</b>		<b>12.9%</b>	<b>0.0%</b>
	Automotive	3.5%	26.9%
	Construction	2.5%	19.2%
	Trucking/Transportation	1.7%	12.8%
	Welding	1.0%	7.7%
	Manufacturing	0.8%	7.1%
	Refrigeration/AC/Heating	0.8%	6.4%
	Agriculture	0.6%	4.5%
	Industrial Maintenance	0.6%	4.5%
	Aviation Maintenance	0.3%	2.6%
	Industrial Technology	0.3%	2.6%
	Machinist/Machine Tool Technology	0.2%	1.9%
	Computer Aided Drafting	0.2%	1.3%
	Drafting	0.2%	1.3%
	Aviation	0.1%	0.6%
	Facilities Maintenance	0.1%	0.6%
<b>Public Services</b>		<b>9.8%</b>	<b>0.0%</b>
	Law Enforcement	5.7%	58.5%
	Emergency Medical Services	1.5%	15.3%
	Fire Science	1.2%	12.7%
	Social Work/Services	1.1%	11.0%
	Homeland Security	0.2%	2.5%
<b>Information Technologies</b>		<b>9.1%</b>	<b>0.0%</b>
	Computer Technologies	3.7%	40.9%
	Networking	2.1%	23.6%
	Multimedia	0.8%	9.1%
	Cybersecurity	0.7%	7.3%
	Graphic Arts/Animation	0.6%	6.4%
	Computer Software	0.5%	5.5%
	Internet Technologies	0.2%	2.7%
	Telecommunications	0.2%	2.7%
	Programming	0.2%	1.8%

**APPENDIX C For-Credit and Noncredit Hot Programs Combined (cont'd)**

Field of Study	Program	% of Combined Programs	% of Field of Study
<b>Business</b>		<b>6.7%</b>	<b>0.0%</b>
	Business	2.2%	33.3%
	Real Estate	1.3%	19.8%
	Office Support	0.9%	13.6%
	Paralegal	0.7%	11.1%
	Accounting	0.7%	9.9%
	Insurance	0.3%	4.9%
	Grant Writing	0.2%	2.5%
	Supervisory/Leadership	0.2%	2.5%
	Human Resources	0.1%	1.2%
	Total Quality Management	0.1%	1.2%
<b>Engineering Technology</b>		<b>4.1%</b>	
	Electrical Engineering	1.7%	42.0%
	Biomedical Engineering	0.6%	14.0%
	Geographic Information Systems	0.6%	14.0%
	Engineering	0.4%	10.0%
	Safety Technology	0.3%	8.0%
	Fuel Technology	0.2%	6.0%
	Chemical Technology	0.1%	2.0%
	Plastics Technology	0.1%	2.0%
	Quality Technology	0.1%	2.0%
<b>Education</b>		<b>3.7%</b>	<b>0.0%</b>
	Education	2.4%	64.4%
	Early Childhood Development	1.3%	35.6%
<b>Skilled Trades—Services</b>		<b>3.7%</b>	<b>0.0%</b>
	Culinary Arts	1.3%	35.6%
	Cosmetology	0.8%	22.2%
	Hospitality/Travel/Tourism	0.7%	17.8%
	Fashion/Floral/Interior Design	0.3%	8.9%
	Golf Course Supervision	0.3%	8.9%
	Mortuary Science	0.2%	6.7%
<b>Languages</b>		<b>1.5%</b>	<b>0.0%</b>
	English as a Second Language	0.9%	61.1%
	Spanish	0.4%	27.8%
	Interpretation—ASL	0.2%	11.1%
<b>Sciences</b>		<b>1.3%</b>	<b>0.0%</b>
	Environmental Science	1.2%	93.8%
	Aquarium Science	0.1%	6.3%
<b>Miscellaneous</b>		<b>0.6%</b>	<b>0.0%</b>
	Liberal Arts/General Studies	0.3%	57.1%
	Multidisciplinary	0.2%	42.9%

## References

Bureau of Labor Statistics. (2004a). *Occupational outlook handbook: Tomorrow's jobs*. Washington, DC: U.S. Department of Labor. <http://www.bls.gov/oco/oco2003.htm>

Bureau of Labor Statistics. (2004b). *Occupations with the fastest job growth, 2002–2012*. Washington, DC: U.S. Department of Labor. <http://www.bls.gov/news.release/ecopro.t04.htm>

Bureau of Labor Statistics. (2004c). *Occupations with the largest job growth, 2002–2012*. Washington, DC: U.S. Department of Labor. <http://www.bls.gov/news.release/ecopro.t05.htm>

Nock, M. M., & Shults, C. (2001). *Hot programs at community colleges*. Washington, DC: Community College Press.

### FOR MORE INFORMATION ON HOT PROGRAMS AT COMMUNITY COLLEGES, CONTACT:

Sara McPhee  
American Association of Community Colleges  
One Dupont Circle, NW, Suite 410  
Washington, DC 20036-1176  
Phone: (202) 728-0200, ext. 258  
Fax: (202) 833-2467  
E-mail: [smcphee@aacc.nche.edu](mailto:smcphee@aacc.nche.edu)  
[www.aacc.nche.edu](http://www.aacc.nche.edu)

### TO ORDER MORE COPIES OF THE HOT PROGRAMS BRIEF, CONTACT:

Community College Press®  
P.O. Box 311  
Annapolis Junction, MD 20701  
Phone: (800) 250-6557  
Fax: (301) 604-0158  
E-mail: [aaccpub@pmds.com](mailto:aaccpub@pmds.com)  
Online Bookstore:  
[www.aacc.nche.edu/bookstore](http://www.aacc.nche.edu/bookstore)  
Order # 1557

© 2004 American Association of Community Colleges. Photocopying for nonprofit educational purposes is permitted.