



Council of Graduate Schools

RESEARCH REPORT

Findings from the 2009 CGS International Graduate Admissions Survey Phase II: Final Applications and Initial Offers of Admission

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Council of Graduate Schools

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Overview

In 2004, the Council of Graduate Schools (CGS) began an extensive, multi-year empirical examination of international graduate application, admission, and enrollment trends. This analysis responds to member institutions' concerns about continuing changes in the enrollment of students from abroad seeking master's and doctoral degrees from U.S. colleges and universities.

The core of this examination is a three-phase survey of CGS member institutions. The *CGS International Graduate Admissions Survey* collects an initial snapshot of applications to U.S. graduate schools from prospective international students (*Phase I*, conducted in February of each year), final applications and an initial picture of admissions offers to prospective international students (*Phase II*, June), and final offers of admission and first-time and total international graduate student enrollment (*Phase III*, October).

Institutions responding to the *Phase II* survey in 2004 reported a 28% decline in applications from prospective international graduate students between 2003 and 2004. Subsequent *Phase II* surveys revealed a 5% decline from 2004 to 2005, followed by a 12% increase from 2005 to 2006. The growth rate slowed in each of the next two years, with year-to-year gains of 9% and 6%.¹

The *CGS International Graduate Admissions Survey* found a similar pattern in terms of final offers of admission. Institutions responding to the survey in 2004 reported an 18% decline in offers of admission to prospective international students. Subsequent *Phase III* surveys revealed a 3% increase from 2004 to 2005 and a 14% gain from 2005 to 2006. The growth rate slowed in each of the next two years, with year-to-year gains of 7% and 3%.²

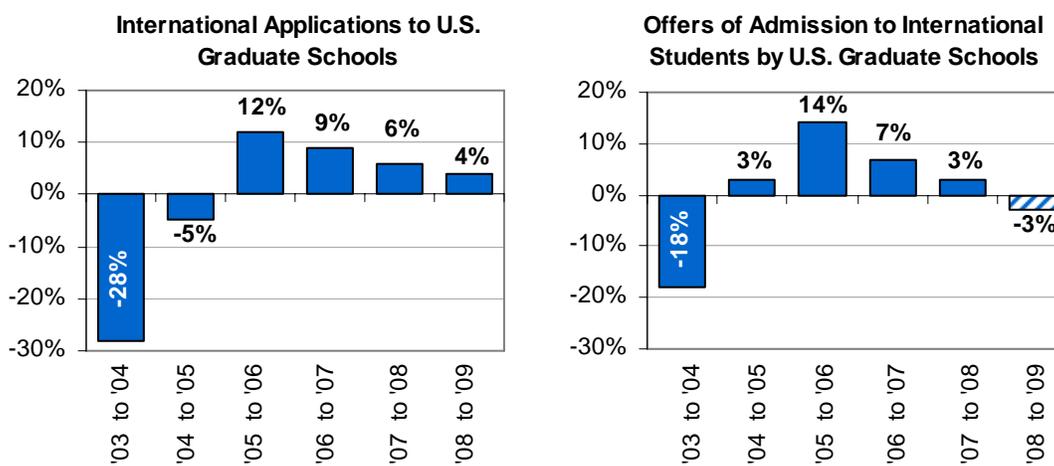
The 2009 *Phase II* survey data show that U.S. graduate schools received an increasing number of applications from prospective international students for fall 2009, but the rate of increase continued to slow for the third year in a row (see Figure 1 on the following page). And, the rebound in international applications still was not large enough to reverse the declines that many institutions reported in 2004. Furthermore, the data show a decline in the initial offers of admission to prospective international students for fall 2009. This is the first decline in offers of admission since 2004.

This report first describes the survey methodology used to collect and calculate changes in applications and offers of admission from 2008 to 2009. The second section presents the current survey results on applications to U.S. graduate schools by prospective international students and compares the one-year changes to those in prior years. The third section presents data on offers of admission to prospective international students by U.S. graduate schools and compares the one-year changes to those in prior

¹ Brown, H. & Syverson, P. 2004. *Findings from U.S. Graduate Schools on International Graduate Student Admissions Trends*. Washington, DC: Council of Graduate Schools; Brown, H. 2005. *Findings from the 2005 CGS International Graduate Student Admissions Survey II: Final Applications and Admissions*. Washington, DC: Council of Graduate Schools; Brown, H. 2006. *Findings from 2006 CGS International Graduate Admissions Survey, Phase II: Final Applications and Offers of Admission*. Washington, DC: Council of Graduate Schools; Redd, K. 2007. *Findings from the 2007 CGS International Graduate Admissions Survey, Phase II: Final Applications and Initial Offers of Admission*. Washington, DC: Council of Graduate Schools; Redd, K. 2008. *Findings from the 2008 CGS International Graduate Admissions Survey, Phase II: Final Applications and Initial Offers of Admission*. Washington, DC: Council of Graduate Schools.

² Brown, H. & Syverson, P. 2004. *Findings from U.S. Graduate Schools on International Graduate Student Admissions Trends*. Washington, DC: Council of Graduate Schools; Brown, H. 2005. *Findings from 2005 CGS International Graduate Admissions Survey III: Admissions and Enrollment*. Washington, DC: Council of Graduate Schools; Redd, K. 2006. *Findings from the 2006 CGS International Graduate Admissions Survey, Phase III: Admissions and Enrollment*. Washington, DC: Council of Graduate Schools; Redd, K. 2007. *Findings from the 2007 CGS International Graduate Admissions Survey, Phase III: Final Offers of Admission and Enrollment*. Washington, DC: Council of Graduate Schools; Bell, N. 2008. *Findings from the 2008 CGS International Graduate Admissions Survey, Phase III: Final Offers of Admission and Enrollment*. Washington, DC: Council of Graduate Schools.

Figure 1. Percent Change in International Applications and Offers of Admission, 2003 to 2004 through 2008 to 2009



Note: For offers of admission, data for international students for 2008 to 2009 are from the *Phase II* survey and are therefore preliminary. All other admissions data are final figures from the *Phase III* surveys.
Sources: CGS International Graduate Admissions Survey, Phase II, 2004 to 2009 and Phase III, 2004 to 2008

years. The fourth section examines changes from 2008 to 2009 in graduate applications from, and offers of admission to, U.S. citizens and permanent residents.

Survey Methodology and Response Rate

The survey population for the *2009 CGS International Graduate Admissions Survey, Phase II: Final Applications and Initial Offers of Admission* consisted of all 501 U.S. colleges and universities that were members of CGS as of May 2009.³ The survey instrument was e-mailed to the graduate dean at each institution on June 3, 2009, and responses were collected electronically through July 24, 2009.

The survey asked institutions to report their final numbers of completed applications received from prospective international graduate students for fall 2008 and fall 2009. In addition, institutions were asked to provide the number of offers of admission granted to prospective international students for fall 2008 and fall 2009 as of June 5th or the same date each year. Institutions were also asked to provide applications and admissions data for international students who originate from four key sending countries or regions and for eight broad fields of study. In the survey, an international student is defined as a person who is not a citizen, national, or permanent resident of the United States and is in this country on a student visa, or on a temporary basis, and does not have the legal right to remain indefinitely.

In addition to the quantitative data collected on prospective international students, institutions were asked to respond to two questions about prospective U.S. citizen and permanent resident graduate students. The first question asked if the number of U.S. citizens and permanent residents applying to graduate school at the respondent's institution increased, remained the same, or decreased between Fall 2008 and Fall 2009, and the second asked about the change in the number of U.S. citizens and permanent residents offered admission to graduate school at the respondent's institution.

³ CGS also has member institutions in Canada and overseas affiliate members. These institutions are not included in the *International Graduate Admissions Survey*.

A total of 253 institutions responded to the survey, for a response rate of 50.5%. Both the number of institutions responding and the response rate were record highs for the *International Graduate Admissions Survey*. The response rates among certain types of institutions were even higher: nine of the ten institutions with the largest international graduate student enrollments, 21 of the 25 largest (84%), 44 of the 50 largest (88%), and 86 of the 100 largest (86%) responded to the survey.⁴ The high response rate among the institutions with the largest international student enrollments is important because collectively the 100 largest institutions enroll about 60% of the total international graduate student population in the United States.⁵ The high response rate among these institutions suggests that the survey results accurately depict recent trends in international applications and offers of admission at U.S. graduate schools. Overall, the 253 institutions responding to the *Phase II* survey enrolled 67% of the 280,259 international graduate students in the United States in fall 2007.⁶

Institutions responding to the *Phase II* survey provided data on a total of 485,277 applications to U.S. graduate schools by prospective international students for fall 2009 and on a total of 118,992 offers of admission to prospective international students for fall 2009. In a few cases, institutions were unable to provide data for both 2008 and 2009 for either the totals or one of the subcategories. In those instances, these respondents were excluded from the appropriate analyses. Data were not imputed for non-responding institutions.

For some campuses, the *Phase II* survey was administered before final offers of admission numbers were known, and these institutions provided preliminary figures as of the same date each year. For that reason, the survey results on offers of admission (described in section three of this report) should be considered preliminary, subject to revision in the 2009 *Phase III* survey when final offers of admission numbers are reported. Nonetheless, because of the high response rates among the institutions with the largest numbers of international graduate students and the large numbers of applications and offers of admission represented in the *Phase II* survey data, the overall results do appear to illustrate accurately the current trends in international graduate student applications and offers of admission in the United States.

Applications from Prospective International Graduate Students

Total Number of Applications

Applications to U.S. graduate schools from prospective international students increased between 2008 and 2009, but the rate of increase continued to slow for the third year in a row. Between 2008 and 2009, international graduate applications increased 4%, down from gains of 6% in 2008, 9% in 2007, and 12% in 2006 (see Table 1 on the following page). The final 4% increase in applications from prospective international graduate students is the same as the increase reported for initial international applications in the *Phase I* survey results, published by CGS in April.

While international applications increased 4% overall, there was a great deal of variation around this overall rate. Of the 247 institutions that provided total applications data for both 2008 and 2009 in this year's *Phase II* survey, 135 (55%) reported an increase in international applications for fall 2009, with an average increase of 11% at these institutions. At the 111 institutions (45%) reporting a decrease, the average decline in international applications was 9%. One institution reported no change in applications.

⁴ These enrollment figures are based on enrollment in fall 2007. For more information, see National Center for Education Statistics. Integrated Postsecondary Education Data System (IPEDS) Fall Enrollment Survey. Dataset. On-line. Available: <http://nces.ed.gov/ipeds/>.

⁵ *Ibid.*

⁶ *Ibid.*

Table 1. Change in International Graduate Applications, 2005 to 2006 through 2008 to 2009

	Final Number of Applications, 2005 to 2006	Final Number of Applications, 2006 to 2007	Final Number of Applications, 2007 to 2008	Final Number of Applications, 2008 to 2009
International Total	12%	9%	6%	4%
Country/Region of Origin				
China	19%	19%	11%	14%
India	26%	12%	2%	-12%
South Korea	4%	0%	2%	-9%
Middle East & Turkey *	10%	17%	14%	22%
Field of Study				
Arts & Humanities	5%	8%	7%	5%
Business	16%	15%	10%	7%
Education	1%	12%	-1%	8%
Engineering	19%	13%	4%	3%
Life Sciences	9%	18%	3%	0%
Physical & Earth Sciences	15%	12%	7%	2%
Social Sciences & Psychology	6%	0%	9%	6%
Other Fields **	--	--	--	11%

* Middle East & Turkey includes: Bahrain, Cyprus, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian Authority, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, and Yemen.

** Prior to 2009, data for 'Other Fields' were not collected separately.

Note: Not all responding institutions provided data by country of origin and/or field of study.

Sources: CGS International Graduate Admissions Survey, Phase II, 2006 to 2009

Despite the increases in applications in the four most recent CGS surveys, total applications from international students are still below their 2003 levels at many institutions. About 61% of the 84 institutions that responded to the *Phase II* survey in both 2004 and 2009 had fewer international applications this year than they did in 2003. Collectively, the number of students from abroad applying to these institutions is currently 20% below what it was in 2003. Overall, international applications at all 84 institutions that responded to the *Phase II* survey in both 2004 and 2009 – those reporting increases and those reporting decreases – also remain 5% below 2003 levels.

Applications by Country/Region of Origin

The *CGS International Graduate Admissions Survey* collects data on four key sending countries or regions: India, China, South Korea, and the Middle East & Turkey. India, China, and South Korea are the top three countries of origin for international graduate students in the United States. Collectively, students from these three countries account for about one-half of all non-U.S. citizens on temporary visas attending U.S. graduate schools, according to research from both CGS and the Institute of International Education.⁷ Thus, examining student flows from these three countries provides a good indicator of overall

⁷ Bell, N. 2008. *Findings from the 2008 CGS International Graduate Admissions Survey, Phase III: Final Offers of Admission and Enrollment*. Washington, DC: Council of Graduate Schools; Bhandari, R. & Chow, P. 2008. *Open Doors 2008: Report on International Education Exchange*. New York, NY: Institute of International Education.

international applications trends. Applications from students from countries in the Middle East & Turkey⁸ have also been included in the CGS surveys because of the geopolitical importance of this region; graduate students from the Middle East & Turkey currently account for about 5% of all international graduate students in the United States.

The *Phase II* survey results reveal that graduate applications from prospective students from India fell 12% in 2009, following an increase of 2% in 2008, and double-digit increases in both 2007 and 2006 (see Table 1). Similarly, applications from prospective students from South Korea fell 9% in 2009, following an increase of 2% in 2008.

The numbers of applications from both China and the Middle East & Turkey increased dramatically in 2009. Graduate applications from prospective students from China increased 14% in 2009, up from an 11% gain in 2008; this is the fourth consecutive year of double-digit growth. A similar surge in applications occurred among prospective students from the Middle East & Turkey, with a 22% increase in applications in 2009, up from a 14% gain in 2008, and also the fourth consecutive year of double-digit growth.

Applications by Field of Study

The majority (61%) of all international graduate students at U.S. institutions are enrolled in one of three broad fields: engineering, physical & earth sciences (including mathematics and computer science), and business.⁹ For fall 2009, international applications increased in all three of these broad fields (see Table 1). In business, international applications increased 7% in 2009, following a 10% gain in 2008. In engineering, applications increased 3% in 2009, following a gain of 4% in 2008, and in physical & earth sciences, applications increased 2% in 2009, following a gain of 7% in 2008.

Life sciences and social sciences & psychology also account for large numbers of international students at U.S. institutions. In fall 2007, 22% of international students were enrolled in these broad fields.¹⁰ The *Phase II* survey reveals that applications from prospective international students for fall 2009 remained flat in life sciences. This was the only broad field in which no growth occurred, and follows a 3% increase in applications last year. Applications for fall 2009 increased in social sciences & psychology (up 6%), but the rate of increase slowed from 9% in 2008.

Just 18% of all international graduate students at U.S. institutions are enrolled in the three remaining broad fields (education, arts & humanities, and 'other' fields).¹¹ Applications to all three of these broad fields increased in 2009, with the strongest gain in 'other' fields (11%) and the smallest increase in arts & humanities (5%).

Overall, applications increased in 2009 in seven of the eight broad fields,¹² with the largest increase in 'other' fields (11%). In four other broad fields (arts & humanities, business, education, and social sciences & psychology) the increases also exceeded the overall 4% gain in international applications for fall 2009. Applications in engineering increased 3%, those in physical & earth sciences increased 2%, and applications remained flat in life sciences between 2008 and 2009.

⁸ Middle East & Turkey includes: Bahrain, Cyprus, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian Authority, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, and Yemen.

⁹ Bell, N. 2008. *Graduate Enrollment and Degrees: 1997 to 2007*. Washington, DC: Council of Graduate Schools.

¹⁰ *Ibid.*

¹¹ *Ibid.*

¹² See Appendix A for the summarized survey taxonomy.

Applications by Institutional Control and Carnegie Classification

Applications from prospective international students increased at both public institutions and private, not-for-profit institutions in 2009. Of the 247 institutions that provided total applications data for both 2008 and 2009 in this year's *Phase II* survey, 177 were public institutions, 69 were private, not-for-profit institutions, and one was a private, for-profit institution. At public institutions, international applications increased 4% in 2009, and at private, not-for-profit institutions, international applications increased 3% (Table 2). Data for the one private, for-profit respondent are included in the total but are not broken out separately.

Institutions responding to the *Phase II* survey with 2008 and 2009 data were coded according to their 2005 Carnegie basic classification. In the analysis, the 163 responding institutions classified as RU/VH: Research Universities (very high research activity), RU/H: Research Universities (high research activity), or DRU: Doctoral/Research Universities were grouped as doctoral institutions. The 69 responding institutions classified as Master's/L: Master's Colleges and Universities (larger programs), Master's/M: Master's Colleges and Universities (medium programs), or Master's/S: Master's Colleges and Universities (smaller programs) were grouped as master's institutions. Only 15 responding institutions had classifications not listed above and were therefore excluded from this particular analysis.

Overall, graduate applications from international students for fall 2009 increased 4% at doctoral institutions, but fell 1% at master's institutions. Larger numbers of applications on average at doctoral institutions helped offset the decline seen at master's institutions, resulting in the overall 4% increase at all types of institutions.

Table 2. Change in Total International Graduate Applications by Institutional Control and Carnegie Classification, 2008 to 2009

	Number of Respondents	Percentage Change in Applications
Total (All Institutions) *	247	4%
Public	177	4%
Private, not-for-profit	69	3%
Doctoral Institutions *	163	4%
Public	118	5%
Private, not-for-profit	44	3%
Master's Institutions	69	-1%
Public	51	0%
Private, not-for-profit	18	-6%

* One private, for-profit institution is included in the total, but is not broken out separately.

Notes: All results are based on the 247 institutions providing total applications data for both 2008 and 2009 in this year's *Phase II* survey. Carnegie classifications are based on the 2005 Carnegie Classification of Institutions of Higher Education. See text for description of Carnegie groupings. The 15 institutions classified as specialized or baccalaureate institutions are included in the total but are not broken out separately.

Source: CGS International Graduate Admissions Survey, Phase II, 2009

When the data are examined by Carnegie classification and institutional control, the findings for doctoral institutions are similar to the overall totals. International applications increased 5% at public, doctoral institutions and 3% at private, not-for-profit doctoral institutions. At master's-focused institutions, international applications remained flat at public institutions and fell 6% at private, not-for-profit institutions; however, these results should be interpreted cautiously given the small number of private, not-for-profit master's institutions responding to the survey.

Applications by Size of International Graduate Enrollment

The overall changes in the numbers of applications from prospective international students potentially mask substantial differences between small and large institutions. To show the wide variation in trends, CGS reports changes in international applications by size of total international graduate student enrollment. Enrollment size is based on data collected by the U.S. Department of Education.¹³

Table 3 displays the changes in international graduate applications from 2008 to 2009 for the responding colleges and universities with the 10, 25, 50, and 100 largest enrollments of international graduate students. In addition, data are presented for all responding institutions outside the largest 100.

Table 3. Change in International Graduate Applications by Size of International Student Enrollment, 2008 to 2009

	10 Largest Institutions	25 Largest Institutions	50 Largest Institutions	100 Largest Institutions	All Other Institutions
International Total	6%	6%	5%	4%	4%
Country/Region of Origin					
China	20%	19%	18%	15%	8%
India	-8%	-10%	-10%	-12%	-15%
South Korea	-8%	-7%	-8%	-9%	-9%
Middle East & Turkey *	17%	17%	19%	19%	33%
Field of Study					
Arts & Humanities	10%	10%	8%	7%	1%
Business	4%	6%	5%	6%	12%
Education	9%	4%	3%	5%	14%
Engineering	8%	7%	6%	5%	-5%
Life Sciences	5%	4%	2%	0%	-1%
Physical & Earth Sciences	2%	4%	6%	3%	-2%
Social Sciences & Psychology	9%	9%	8%	7%	2%
Other Fields	9%	4%	6%	6%	23%

* Middle East & Turkey includes: Bahrain, Cyprus, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian Authority, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, and Yemen.

Notes: Size of international student enrollment is based on NCES data for fall 2007. See footnote 4 for more information. Not all responding institutions provided data by country of origin and/or field of study.

Source: CGS International Graduate Admissions Survey, Phase II, 2009

¹³ See footnote 4 for more information.

Overall, international graduate applications increased 6% at the responding institutions that are among the 10 largest in terms of total international graduate student enrollment, 6% at the 25 largest, 5% at the 50 largest, and 4% at the 100 largest. International graduate applications also increased 4% between 2008 and 2009 at the institutions outside the largest 100.

This pattern of larger increases in applications at institutions with larger numbers of international graduate students held true for applications from prospective students from China, but among prospective students from the Middle East, the largest increase was at institutions outside the largest 100 (33%). Applications from prospective students from South Korea fell by similar amounts across the five size categories shown in Table 3, but for India, the largest decline was at institutions outside the largest 100 (-15%), and the smallest decrease was at the 10 largest institutions (-8%).

By broad field, declines in international applications were seen at institutions outside the largest 100 in engineering, life sciences, and physical & earth sciences. These were the only three declines across the five size categories shown in Table 3. In arts & humanities, engineering, life sciences, physical & earth sciences, and social sciences & psychology, growth in applications was concentrated in larger institutions, but in three broad fields (business, education, and 'other' fields) applications increased more at institutions outside the largest 100 than at larger institutions.

Applications by Geographic Region

Applications to U.S. graduate schools from prospective international students increased in all four major regions of the United States. Of the 247 institutions that provided total applications data for both 2008 and 2009 in this year's *Phase II* survey, 91 institutions are located in the South, 43 institutions are located in the West, 65 in the Midwest, and 48 in the Northeast.¹⁴ International applications increased most in the South and West (both up 6%), followed by the Midwest (up 3%), and the Northeast (up 2%).

Offers of Admission to Prospective International Graduate Students

Total Number of Offers of Admission

While applications to U.S. graduate schools from prospective international students increased between 2008 and 2009, this was not the case for offers of admission. For prospective international students, offers of admission to U.S. graduate schools decreased 3% between 2008 and 2009, the first decline in offers of admission since 2004. This year's decline in initial offers of admission to prospective international students follows final gains of 3% in 2008, 7% in 2007, and 14% in 2006 (see Table 4 on the following page).

Of the 246 institutions that provided data on offers of admission for both 2008 and 2009 in this year's *Phase II* survey, 111 (45%) reported an increase in international offers of admission for fall 2009, with an average increase of 12% at these institutions. At the 132 institutions (54%) reporting a decrease, the average decline in international offers of admission was 17%. Three institutions (1%) reported no change in offers of admission.

¹⁴ States were divided into regions as follows: *Midwest* – Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; *Northeast* – Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; *West* – Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming; and *South* – Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, Puerto Rico, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

Table 4. Change in International Offers of Admission, 2005 to 2006 through 2008 to 2009

	Final Number of Offers of Admission, 2005 to 2006	Final Number of Offers of Admission, 2006 to 2007	Final Number of Offers of Admission, 2007 to 2008	Initial Number of Offers of Admission, 2008 to 2009
International Total	14%	7%	3%	-3%
Country/Region of Origin				
China	24%	24%	15%	13%
India	26%	9%	-2%	-16%
South Korea	4%	-3%	-2%	-16%
Middle East & Turkey *	6%	4%	13%	10%
Field of Study				
Arts & Humanities	-6%	3%	0%	-1%
Business	15%	4%	2%	-5%
Education	9%	-8%	-7%	5%
Engineering	27%	5%	0%	-4%
Life Sciences	4%	4%	-1%	-1%
Physical & Earth Sciences	7%	-10%	9%	-4%
Social Sciences & Psychology	3%	-1%	1%	1%
Other Fields **	--	--	--	5%

* Middle East & Turkey includes: Bahrain, Cyprus, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian Authority, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, and Yemen.

** Prior to 2009, data for 'Other Fields' were not collected separately.

Note: Not all responding institutions provided data by country of origin and/or field of study.

Sources: CGS International Graduate Admissions Survey, Phase III, 2006 to 2008, and Phase II, 2009

Offers of admission to international students remain below their 2003 levels at many institutions. About 49% of the 82 institutions that responded to the *Phase II* survey in both 2004 and 2009 made fewer offers of admission to prospective international students this year than they did in 2003. Collectively, the number of students from abroad being offered admission to these institutions is currently 24% below what it was in 2003. Despite this decline, the overall number of offers of admission to prospective international students by all 82 institutions that responded to the *Phase II* survey in both 2004 and 2009 is 16% higher this year than it was in 2003. This statistic should be interpreted cautiously though, since it is based on a smaller subset of institutions than the 2008 to 2009 comparisons, and the majority of the institutions that responded in both 2004 and 2009 are institutions with large international graduate student enrollments.

Offers of Admission by Country/Region of Origin

Offers of admission to prospective graduate students from India fell 16% in 2009, following a 2% decline in 2008, and increases of 9% in 2007 and 26% in 2006 (see Table 4). Offers of admission to prospective graduate students from South Korea also fell 16% in 2009, following small decreases in each of the last two years.

Offers of admission to prospective students from China continued to increase in 2009, with a 13% gain; this is the fourth consecutive year of double-digit growth. Offers of admission to prospective students from the Middle East & Turkey increased 10% in 2009, following a 13% gain in 2008.

Offers of Admission by Field of Study

Increases in offers of admission occurred in three broad fields in 2009; in 'other' fields and education, offers of admission to prospective international students increased 5%, and in social sciences & psychology, offers of admission increased 1% (see Table 4). The increase in education follows a 7% decline in 2008.

In all other broad fields in 2009, offers of admission declined, with the smallest decreases in arts & humanities and life sciences (both -1%) and the largest in business (-5%). Offers of admission decreased 4% in both engineering and physical & earth sciences in 2009. Of the five broad fields that experienced declines in 2009, only life sciences also decreased in 2008.

Offers of Admission by Institutional Control and Carnegie Classification

Offers of admission to prospective international students decreased at both public institutions and private, not-for-profit institutions in 2009. Of the 246 institutions that provided total offers of admission data for both 2008 and 2009 in this year's *Phase II* survey, 176 were public institutions, 69 were private, not-for-profit institutions, and one was a private, for-profit institution. At public institutions, international offers of admission decreased 3% in 2009, and at private, not-for-profit institutions, international offers of admission decreased 1% (Table 5). Data for the one private, for-profit respondent are included in the total but are not broken out separately.

Table 5. Change in Total International Offers of Admission by Institutional Control and Carnegie Classification, 2008 to 2009

	Number of Respondents	Percentage Change in Offers of Admission
Total (All Institutions) *	246	-3%
Public	176	-3%
Private, not-for-profit	69	-1%
Doctoral Institutions *	162	-2%
Public	117	-3%
Private, not-for-profit	44	0%
Master's Institutions	69	-9%
Public	51	-8%
Private, not-for-profit	18	-11%

* One private, for-profit institution is included in the total, but is not broken out separately.

Notes: All results are based on the 246 institutions providing total offers of admission data for both 2008 and 2009 in this year's *Phase II* survey. Carnegie classifications are based on the 2005 Carnegie Classification of Institutions of Higher Education. See text for description of Carnegie groupings. The 15 institutions classified as specialized or baccalaureate institutions are included in the total but are not broken out separately.

Source: CGS International Graduate Admissions Survey, Phase II, 2009

Overall, offers of admission to prospective international students for fall 2009 decreased 2% at doctoral institutions and 9% at master's institutions (see Table 5). By Carnegie classification and institutional control, international offers of admission decreased 3% at public, doctoral institutions, but remained level at private, not-for-profit doctoral institutions. At master's-focused institutions, international offers of admission fell 8% at public institutions and 11% at private, not-for-profit institutions; however, these results should be interpreted cautiously given the small number of private, not-for-profit master's institutions responding to the survey

Offers of Admission by Size of International Graduate Enrollment

Table 6 displays the changes in international offers of admission from 2008 to 2009 for the responding colleges and universities with the 10, 25, 50, and 100 largest enrollments of international graduate students. In addition, data are presented for all responding institutions outside the largest 100.

Overall, institutions with large numbers of international graduate students were more likely to increase the number of offers of admission to prospective international students in 2009 than institutions with smaller numbers of international graduate students. International offers of admission increased 4% at the responding institutions that are among the 10 largest and 3% at the 25 largest, but declined 1% at the 50 largest, 3% at the 100 largest, and 3% at the institutions outside the largest 100.

Table 6. Change in International Offers of Admission by Size of International Student Enrollment, 2008 to 2009

	10 Largest Institutions	25 Largest Institutions	50 Largest Institutions	100 Largest Institutions	All Other Institutions
International Total	4%	3%	-1%	-3%	-3%
Country/Region of Origin					
China	32%	24%	20%	15%	7%
India	3%	-6%	-14%	-16%	-15%
South Korea	-11%	-13%	-13%	-16%	-15%
Middle East & Turkey *	2%	8%	7%	6%	22%
Field of Study					
Arts & Humanities	9%	3%	2%	1%	-5%
Business	6%	0%	-6%	-6%	-3%
Education	5%	-5%	0%	5%	3%
Engineering	16%	10%	0%	-3%	-7%
Life Sciences	27%	10%	0%	-2%	3%
Physical & Earth Sciences	4%	1%	5%	-1%	-10%
Social Sciences & Psychology	7%	5%	3%	2%	-4%
Other Fields	-12%	0%	2%	1%	14%

* Middle East & Turkey includes: Bahrain, Cyprus, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian Authority, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, and Yemen.

Notes: Size of international student enrollment is based on NCES data for fall 2007. See footnote 4 for more information. Not all responding institutions provided data by country of origin and/or field of study.

Source: CGS International Graduate Admissions Survey, Phase II, 2009

For prospective graduate students from China and the Middle East & Turkey, offers of admission increased across all five size categories shown in Table 6. The largest increases for China were at the 10 largest and 25 largest institutions in terms of international graduate student enrollment, with increases of 32% and 24% respectively. For prospective students from the Middle East & Turkey, offers of admission increased 2% at the 10 largest institutions, but increased 22% at the institutions outside the largest 100.

Offers of admission to prospective students from South Korea fell across all five size categories shown in Table 6, with decreases ranging from -11% to -16%. Despite a 16% overall decline in offers of admission to prospective students from India, the 10 largest institutions made 3% more offers of admission to applicants from India. In contrast, offers of admission to Indian applicants decreased 16% at the 100 largest institutions and 15% at the institutions outside the largest 100.

By broad field, the 10 largest institutions increased their offers of admission to prospective international students in all broad fields except 'other' fields, in which offers declined 12%. The largest increase at the 10 largest institutions was in life sciences (27%). Declines in international offers of admission were seen at the 100 largest institutions in four broad fields—business (-6%), engineering (-3%), life sciences (-2%), and physical & earth sciences (-1%). At the institutions outside the largest 100, offers of admission increased 14% in 'other' fields, and 3% in both education and life sciences. International offers of admission declined in all other broad fields among the institutions outside the largest 100, with the largest decrease in physical & earth sciences (-10%).

Offers of Admission by Geographic Region

Offers of admission by U.S. graduate schools to prospective international students decreased in three of the four major regions of the United States in 2009. Of the 246 institutions that provided total offers of admission data for both 2008 and 2009 in this year's *Phase II* survey, 43 institutions are located in the West, 48 institutions are located in the Northeast, 90 in the South, and 65 in the Midwest.¹⁵ International offers of admission increased in the West (up 4%), but decreased 7% in the Northeast, 4% in the South, and 1% in the Midwest.

U.S. Citizen and Permanent Resident Applications and Offers of Admission

The *Phase II* survey asked institutions to respond to two questions about prospective U.S. citizen and permanent resident graduate students. The first question asked if the number of U.S. citizens and permanent residents applying to graduate school at the respondent's institution increased, remained the same, or decreased between Fall 2008 and Fall 2009, and the second asked if the number of U.S. citizens and permanent residents offered admission to graduate school at the respondent's institution increased, remained the same, or decreased between Fall 2008 and Fall 2009. For both questions, respondents were asked to provide the percentage by which applications or offers of admission increased or decreased, as appropriate. The survey phrased the questions in this manner, rather than asking for actual numbers for applications and offers of admission, in order to reduce the burden on the respondents.

Applications from U.S. Citizens and Permanent Residents

A total of 240 institutions responded to the first question about applications from U.S. citizens and permanent residents. Among those institutions, 181 respondents (75%) reported that applications from prospective U.S. citizen and permanent resident graduate students increased at their institution in fall 2009 when compared with fall 2008, 13 (5%) reported no change in applications from U.S. citizens and

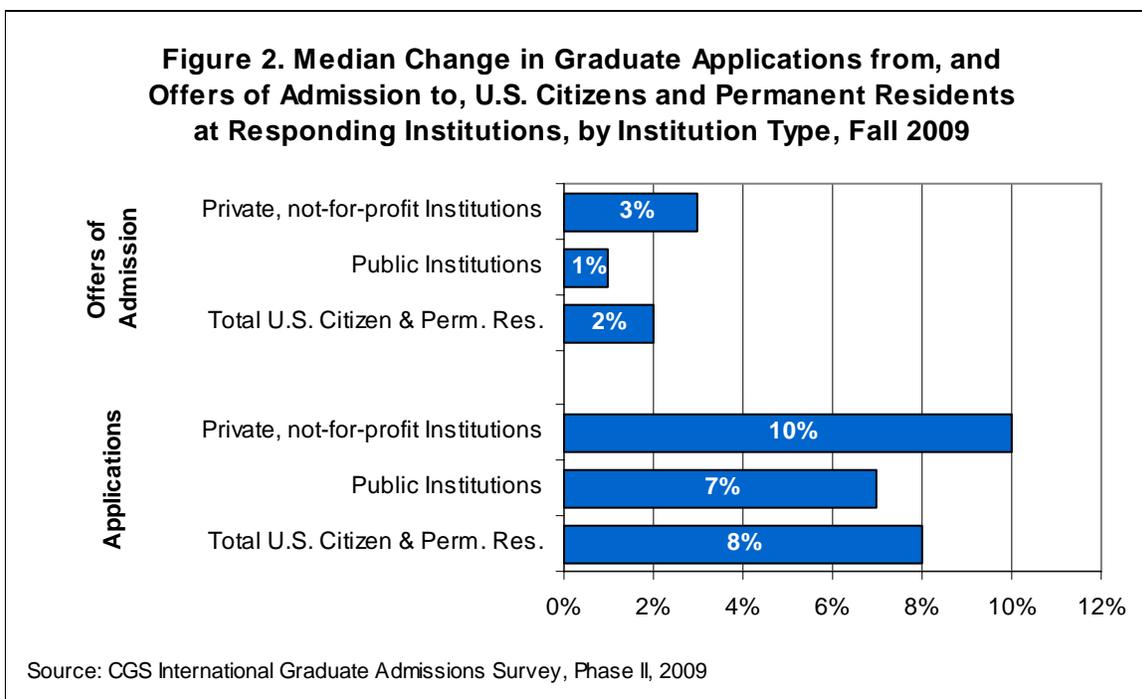
¹⁵ See footnote 14 for a listing of the states included in each region.

permanent residents, and 46 (19%) said that applications from U.S. citizens and permanent residents declined between 2008 and 2009.

Among the institutions reporting an increase in applications from prospective U.S. citizen and permanent resident graduate students in fall 2009, the average increase in applications was 14%, and the median increase was 10%. Among the institutions reporting a decrease in applications from prospective U.S. citizen and permanent resident graduate students in fall 2009, the average decline in applications was 12%, and the median decline was 8%.¹⁶

For all respondents (those reporting an increase, decrease, or no change), the average increase in applications from prospective U.S. citizen and permanent resident graduate students was 9%, and the median increase was 8% (Figure 2). These figures, however, cannot be interpreted as the likely percentage increase in applications nationally for fall 2009. Since each institution simply provided a percentage increase or decrease and did not provide the actual number of applicants for fall 2008 and fall 2009, it is impossible to calculate from these percentages the actual numerical change that might occur nationally in fall 2009. The percentage changes at institutions with large numbers of applicants would more significantly influence national figures than the changes at institutions with smaller numbers of applicants. Therefore, these figures simply represent the typical changes in applications at a large sample of colleges and universities and provide an early indicator of the numbers of U.S. citizens and permanent residents applying for admission to U.S. graduate schools for fall 2009.

Public institutions and private, not-for-profit institutions were equally likely to report an increase in applications from prospective U.S. citizen and permanent resident graduate students for fall 2009—75% of public institutions and 76% of private, not-for-profit institutions did so. Similarly, 19% of respondents from both public institutions and private, not-for-profit institutions reported a decrease in applications from



¹⁶ Five of the institutions that reported an increase in applications and one of the institutions that reported a decrease did not provide the actual percentage by which applications changed.

U.S. citizens and permanent residents. Six percent of public institutions and 4% of private, not-for-profit institutions reported no change in applications between 2008 and 2009. For all public institutions (those reporting an increase, decrease, or no change), the average increase in applications from prospective U.S. citizen and permanent resident graduate students was 9%, and the median increase was 7% (see Figure 2). For all private, not-for-profit institutions, the average increase in applications from U.S. citizens and permanent residents was 9%, and the median increase was 10%.

Doctoral institutions were more likely than master's institutions to report an increase in applications from prospective U.S. citizen and permanent resident graduate students for fall 2009.¹⁷ The vast majority of doctoral institutions (84%) reported an increase in applications from U.S. citizens and permanent residents, while only 58% of master's institutions did so. Conversely, only 13% of doctoral institutions reported a decrease in U.S. citizen and permanent resident applicants, compared with 31% of master's institutions. Four percent of doctoral institutions and 11% of master's institutions reported no change in applications. For all doctoral institutions, the average increase in applications from prospective U.S. citizen and permanent resident graduate students was 10%, and the median increase was 9%. For all master's institutions, the average increase in applications was 4%, and the median increase was 3%.

Offers of Admission to U.S. Citizens and Permanent Residents

While three-quarters of all respondents said applications from U.S. citizens and permanent residents were up at their institution, the percentage indicating an increase in offers of admission to U.S. citizens and permanent residents was lower. Of the 240 institutions that responded to the question about offers of admission to U.S. citizens and permanent residents, 139 respondents (58%) reported that offers of admission to prospective U.S. citizen and permanent resident graduate students increased at their institution in fall 2009 when compared with fall 2008, 18 (8%) reported no change in offers of admission to U.S. citizens and permanent residents, and 83 (35%) said that offers of admission to U.S. citizens and permanent residents declined between 2008 and 2009.

Among the institutions reporting an increase in offers of admission to prospective U.S. citizen and permanent resident graduate students in fall 2009, the average increase in offers of admission was 17%, and the median increase was 9%. Among the institutions reporting a decrease in offers of admission to prospective U.S. citizen and permanent resident graduate students in fall 2009, the average decline in offers of admission was 16%, and the median decline was 10%.¹⁸ For all respondents (those reporting an increase, decrease, or no change), the average increase in offers of admission was 4%, and the median increase was 2% (see Figure 2). As noted above, these figures cannot be interpreted as the likely increase in offers of admission nationally for fall 2009.

Private, not-for-profit institutions were slightly more likely than public institutions to report an increase in offers of admission to prospective U.S. citizen and permanent resident graduate students for fall 2009—60% of private, not-for-profit institutions versus 57% of public institutions did so. Conversely, public institutions were slightly more likely to report a decrease in offers of admission to U.S. citizens and permanent residents—36% of public institutions and 32% of private, not-for-profit institutions did so. Eight percent of public institutions and 7% of private, not-for-profit institutions reported no change in offers of admission between 2008 and 2009. For all public institutions (those reporting an increase, decrease, or no change), the average increase in offers of admission to prospective U.S. citizen and permanent

¹⁷ Doctoral institutions include those with 2005 basic Carnegie classification of RU/VH: Research Universities (very high research activity), RU/H: Research Universities (high research activity), and DRU: Doctoral/Research Universities. Master's institutions are those classified as Master's/L: Master's Colleges and Universities (larger programs), Master's/M: Master's Colleges and Universities (medium programs), or Master's/S: Master's Colleges and Universities (smaller programs).

¹⁸ Four of the institutions that reported an increase in offers of admission and four of the institutions that reported a decrease did not provide the actual percentage by which offers of admission changed.

resident graduate students was 4%, and the median increase was 1% (see Figure 2). For all private, not-for-profit institutions, the average increase in offers of admission to U.S. citizens and permanent residents was 5%, and the median increase was 3%.

Similar to the findings for applications from U.S. citizens and permanent residents, doctoral institutions were more likely than master's institutions to report an increase in offers of admission to U.S. citizens and permanent residents for fall 2009. About six out of ten doctoral institutions (62%) reported an increase in offers of admission to U.S. citizens and permanent residents, compared with 52% of master's institutions. About one-third of both doctoral institutions (33%) and master's institutions (34%) reported a decrease in offers of admission to U.S. citizens and permanent residents. Five percent of doctoral institutions and 14% of master's institutions reported no change in offers of admission. For all doctoral institutions, the average increase in offers of admission to prospective U.S. citizen and permanent resident graduate students was 8%, and the median increase was 3%. For all master's institutions, offers of admission declined on average (-2%), but the median was an increase of 1%.

Summary and Conclusions

The results of the *2009 CGS International Graduate Admissions Survey, Phase II: Final Applications and Initial Offers of Admission* show that applications to U.S. graduate schools from prospective international students increased 4% between 2008 and 2009, but the rate of increase continued to slow for the third year in a row, down from 6% in 2008, 9% in 2007 and 12% in 2006. This year's increase was driven in part by double-digit increases in applications from China (up 14%) and the Middle East & Turkey (up 22%). However, applications from prospective students from both India and South Korea fell in 2009, with declines of 12% and 9%, respectively.

Most broad fields of study exhibited strong growth in international applications in 2009, led by large increases in 'other' fields (up 11%) and education (up 8%). In business, engineering, and physical & earth sciences (including mathematics and computer science), the three largest fields for international students at U.S. graduate schools, applications increased by 7%, 3%, and 2%, respectively. Life sciences (0%) was the only field in which international applications did not increase in 2009.

Applications from prospective international graduate students increased 4% at public institutions and 3% at private, not-for-profit institutions in 2009. By Carnegie classification, doctoral institutions experienced a 4% increase, but international graduate applications fell 1% at master's institutions.

Institutions that are largest in terms of international graduate student enrollment typically had larger increases in applications from prospective international graduate students in 2009. Overall, international graduate applications increased 6% at the responding institutions that are among the 10 largest in terms of international graduate enrollment, 4% at the 100 largest, and 4% at the institutions outside the largest 100.

Offers of admission to prospective international graduate students fell 3% in 2009, the first decline in offers of admission since 2004. This year's decline was due in part to double-digit decreases in offers of admission to prospective students from India and South Korea, both with 16% declines. Offers of admission to prospective graduate students from China increased 13% in 2009, and offers of admission to students from the Middle East & Turkey increased 10%.

Increases in offers of admission to prospective international graduate students occurred in just three broad fields in 2009; 'other' fields (5%), education (5%), and social sciences & psychology (1%). In business, engineering, and physical & earth sciences, the three largest fields for international students at U.S. graduate schools, offers of admission decreased by 5%, 4%, and 4%, respectively.

Offers of admission to prospective international graduate students decreased 3% at public institutions and 1% at private, not-for-profit institutions in 2009. By Carnegie classification, doctoral institutions experienced a 2% decrease and master's institutions a 9% drop.

Overall, institutions with large numbers of international graduate students were more likely to increase the number of offers of admission to prospective international graduate students in 2009 than institutions with smaller numbers of international graduate students. Offers of admission increased 4% at the responding institutions that are among the 10 largest in terms of international graduate enrollment, but fell 3% at the 100 largest and also dropped by 3% at the institutions outside the largest 100.

Two statistics from the *Phase II* survey are particularly troubling. The first is the decrease in offers of admission to prospective international graduate students. While growth in international offers of admission had slowed in 2007 and 2008, this year's 3% decline is the first drop since 2004. Since the *Phase II* survey collects initial offers of admission, it is possible that this figure will be revised when the final offers of admission data from the *Phase III* survey are analyzed this fall. However, it is unlikely that this figure will change enough to reverse the decline.

Second, the declines in applications from, and offers of admission to, prospective graduate students from India and South Korea continue a trend seen in recent *CGS International Graduate Admissions Surveys*. The latest *Phase III* survey found that first-time enrollment fell 2% for students from India and 4% for students from South Korea in fall 2008.¹⁹ Given the large declines in applications from students from these two countries in 2009, and the even larger decreases in offers of admission to students from India and South Korea, first-time graduate enrollment of Indians and South Koreans will undoubtedly decline again in fall 2009.

It is difficult to make direct comparisons between the *Phase II* survey data for international students and the data for U.S. citizens and permanent residents due to the way the data were collected, but some inferences can be drawn. It is clear from the data that institutions were more likely to have increases in applications from, and offers of admission to, U.S. citizens and permanent residents than prospective international students. Three-quarters (75%) of the responding institutions reported an increase in applications from U.S. citizens and permanent residents, while 55% reported an increase in international applications for fall 2009. Similarly, 58% of the responding institutions reported an increase in offers of admission to U.S. citizens and permanent residents, while just 45% reported an increase in international offers of admission for fall 2009. These data indicate that the citizenship distribution of the first-time graduate students in fall 2009 could shift from recent trends, with U.S. citizens and permanent residents comprising a larger share of first-time enrollees in fall 2009 than in fall 2008, and international students a smaller share.

It is not clear at this point if first-time international graduate student enrollment will ultimately increase or decrease in fall 2009. Although initial international offers of admission are down 3%, if a larger-than-usual share of admitted students enroll, first-time graduate enrollment could remain level for international students in fall 2009. A more likely scenario, however, is that there will be a slight decline in first-time international graduate student enrollment. This decline will probably be concentrated at smaller institutions, since international offers of admission by the institutions that are among the 10 and 25 largest in terms of international graduate enrollment actually increased in 2009 by 4% and 3%, respectively, compared with decreases in offers of admission at smaller institutions.

¹⁹ Bell, N. 2008. *Findings from the 2008 CGS International Graduate Admissions Survey, Phase III: Final Offers of Admission and Enrollment*. Washington, DC: Council of Graduate Schools.

The financial aid offers received by prospective students could have the greatest influence on first-time international graduate enrollment in fall 2009. Given the current economic situation for many universities and states, it is possible that the dollar amount of the financial aid offers that accompanied offers of admission were smaller in some cases than expected. Since international students must demonstrate that they have money to pay for graduate school in order to obtain a visa, some students may have been unable to accept an offer of admission if the financial aid offer did not adequately cover their tuition and living expenses. If financial aid offers were indeed smaller in some cases in 2009 than in previous years, this will likely have a negative effect on first-time international graduate student enrollment. The *Phase III CGS International Graduate Admissions Survey*, to be released in November, will provide data on the ultimate graduate school decisions of international students for fall 2009.

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The Council of Graduate Schools (CGS) is an organization of over 500 institutions of higher education in the United States and Canada engaged in graduate education, research, and the preparation of candidates for advanced degrees. Among U.S. institutions, CGS members award 95% of the doctoral degrees and 84% of the master's degrees.²⁰ The organization's mission is to improve and advance graduate education, which it accomplishes through advocacy in the federal policy arena, research, and the development and dissemination of best practices.

²⁰ Based on data from the 2007 *CGS/GRE Survey of Graduate Enrollment and Degrees*.

Appendix A
CGS International Graduate Admissions Survey Taxonomy

ARTS & HUMANITIES

Arts – History, Theory & Criticism
Arts – Performance & Studio
English Language & Literature
Foreign Languages & Literatures
History
Philosophy
Arts & Humanities, Other

BUSINESS

Accounting
Banking and Finance
Business Administration & Management
Business, Other

EDUCATION

Education Administration
Curriculum and Instruction
Early Childhood Education
Elementary Education
Evaluation and Research
Higher Education
Secondary Education
Special Education
Student Counseling & Personnel Services
Education, Other

ENGINEERING

Chemical Engineering
Civil Engineering
Electrical & Electronics Engineering
Industrial Engineering
Materials Engineering
Mechanical Engineering
Engineering, Other

LIFE SCIENCES

Agriculture
Biological Sciences
Health & Medical Sciences

PHYSICAL & EARTH SCIENCES

Chemistry
Computer & Information Sciences
Earth, Atmospheric & Marine Sciences
Mathematical Sciences
Physics & Astronomy
Physical Sciences, Other

SOCIAL SCIENCES & PSYCHOLOGY

Anthropology
Archaeology
Economics
Political Science
Psychology
Sociology
Social Sciences, Other

OTHER FIELDS

Architecture & Environmental Design
Communications
Family & Consumer Sciences
Library & Archival Studies
Public Administration
Religion & Theology
Social Work
Other Fields