

# RECRUITING TRENDS

## 2017-18

### 47th Edition



#### BRIEF 4

### Hiring by Academic Degree

**Key findings from 2017-18 are presented in this research brief. We have broken the release of employer information into a series of short briefs that will be made available over the next six weeks. You can download the briefs from the [Collegiate Employment Research Institute](#).**

# Meet the Completers

We generated this convenience sample from employers currently seeking college talent through their interactions with college and university career services offices. Nearly 200 career service centers from around the country invited their employers to participate in this study. Approximately 3,370 employers provided information useful for understanding recruiting trends and practices. We will use information provided by those recruiting talent for full-time positions, internships, and co-ops for these research briefs. Readers can use the following key sample characteristics to determine how applicable our survey results are for their campus employer base.

Survey respondents by organization size		
<b>Very small</b>	< 49 employees	27%
<b>Small</b>	50-499 employees	37%
<b>Midsize</b>	500-3,999 employees	20%
<b>Large</b>	4,000-24,999 employees	9%
<b>Very large</b>	> 25,000 employees	6%

Active Recruiting by Region	
<b>International</b>	8%
<b>Entire U.S.</b>	32%
<b>Regional recruiting only</b>	60%

Role in College Recruiting	
<b>Full-time positions</b>	71%
<b>Internship or co-op positions only</b>	12%
<b>Short-term hiring</b>	7%
<b>Experienced hiring</b>	10%

Key States	
<b>Michigan</b>	16%
<b>Utah</b>	7%
<b>Illinois</b>	6%
<b>Massachusetts</b>	6%
<b>New York</b>	6%

Institutions Where Companies Recruit Talent	
<b>Two-year public college</b>	31%
<b>Four-year public college</b>	53%
<b>Four-year private college</b>	43%
<b>Two- &amp; four-year for-profit institution</b>	24%
<b>Institution with bachelor's &amp; advanced degree programs</b>	72%
<b>Institution with advanced degrees only</b>	11%
<b>Historically black college &amp; university</b>	19%
<b>Hispanic-serving institution</b>	17%
<b>Asian, Asian-Pacific serving institutions</b>	16%

Key Economic Sectors	
<b>Professional, business &amp; scientific services</b>	19%
<b>Manufacturing</b>	12%
<b>Educational services</b>	11%
<b>Finance &amp; insurance services</b>	8%
<b>Government</b>	7%
<b>Healthcare &amp; social assistance</b>	8%
<b>Nonprofits</b>	8%

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Every year we explore ways to provide insight on how employers distribute their hiring quotas across various academic disciplines. We found that the traditional approach of listing the most requested majors (the hot list) revealed little.

It merely reinforced the strong presence of employers requesting business, computer science, and engineering graduates, particularly at large institutions.

To understand the composition of an organization’s candidate pool, we asked respondents to select the percent of hires expected across different academic disciplines such as arts and humanities, business, communication, engineering, and science. Respondents could indicate that they expected to hire 100 percent from a single discipline or spread their hires across multiple groups. We followed this question by asking how willing respondents were to consider candidates regardless of their academic discipline and offered several categories, such as “accept candidates from all majors.” For recruiters who were seeking talent from specific academic disciplines, a checklist allowed them to choose as many specific academic majors as they wished.

Composition of the hiring pool

Business majors are the most likely to be included in an employer’s hiring pool; 75 percent indicated they would hire at least one business graduate this year. Completing the business example, we found that 8 percent of employers, who indicated that they would hire a business grad in 2017-18, expected to fill their entire hiring quota with business graduates. Another 14 percent will hire business grads for 76-99 percent of their open positions; 13 percent expect to have business grads comprise 51-75 percent of their hires; 24 percent plan to hire 26-50 percent from business; and 41 percent will fill 24 percent or less of their quota with business grads.

The hiring distribution looks different for employers hiring engineers. Forty-five percent of recruiters indicated that they would hire at least one engineer in their talent pool this year. Fourteen percent indicated that all their hires would be engineers. Another 24 percent expect engineers to comprise 76-99 percent of their hires; 14 percent will hire engineers for 51-75 percent of their hires; 17 percent will hire engineers for 26- 50 percent of their hires; and 32 percent will fill 24 percent or less of their quota with engineering grads.

The majority of employers come to campus seeking business, computer science, and engineering graduates; this fact is well known. The surprise, however, is how diverse these employers can be, especially those seeking business and computer science graduates, as they expand recruiting to include a variety of other majors.

With proportionally smaller numbers of employers seeking candidates from arts and humanities, communications, and social sciences, the focus needs to be on employers with the broadest reach across campus. The advantage for these students is that employers willing to consider all majors or their specific majors pull candidates willing to think outside the box.

Hiring targets across academic majors

Twenty-six percent of respondents indicated that they would consider all majors in their candidate pool (a slight decline of 4 percentage points from last year). Fewer employers seek specific groups of majors, such as technical or business degrees.

The hiring outlook in these broad categories is strong across all major groups. The exception is education employers who report only a 4 percent growth for “all education” majors. Employers who selected “all majors” report the highest level of growth at 18 percent. Healthcare and social assistance, represented by a smaller number of employers, is also doing very well with an expansion of 22 percent in job opportunities.

Hiring intentions for specific majors

We looked at the range of disciplines employers selected based on major groups. For example, we selected employers from several of the major disciplines who indicated they planned to hire at least one business major and then plotted the distribution of the academic majors they sought both inside and outside business. Employers expect to include a wide range of majors, but in the tables we listed only the majors most frequently mentioned by at least 10 percent of the employers.

Business employers selected a broad range of majors but focused on advertising, business, communications, computer science, public relations, psychology, technical majors (graphic design and multimedia, for example).

Engineering employers reached beyond engineering disciplines to computer science and a limited number of business degrees. Their reach did not extend noticeably into communication, humanities, or social sciences.

Computer science employers combined their computer science talent with business and communications (including advertising and public relations). Ten percent also sought psychology graduates.

Distribution of Majors Considered for Employment							
Category <sup>a</sup>	Will not hire from this group (%)	Will consider 100% from this group (%)	Will consider 75-99% of all hires from this group (%)	Will consider 51-74% of all hires from this group (%)	Will consider 26-50% of all hires from this group (%)	Will consider 1-25% of all hires from this group (%)	Will consider candidates from all majors (%)
Agriculture & natural resources	78	7	8	7	16	62	60
Arts, humanities & liberal arts	56	3	6	6	23	62	65
Business	25	8	14	13	24	41	52
Communications (pr, advertising)	48	3	6	7	19	65	62
Computer science	41	4	8	8	16	63	49
Education	68	16	22	10	13	38	56
Engineering & technical	55	14	24	14	17	32	39
Health sciences	72	15	15	10	14	45	53
Science & math	65	5	8	9	15	62	53
Social science	66	3	12	9	19	54	64

a. The organization is seeking at least one candidate from the category.



Employers Hiring Selected Academic Majors — Bachelor’s Degrees				
Degree	Employers reporting hiring projects (no.)	Employers seeking (%)	Number of hires per company 2016-17 (avg.)	Change year over year (%)
All majors	605	26	50.4	18
All health science majors	144	6	59.4	22
All agriculture & natural resources majors	111	5	63.1	17
All arts, communications, social sciences, humanities & social science majors	228	10	44.2	16
All technical majors (engineering, computer science, & IT)	460	20	42.2	12
All business majors	453	19	66.6	9
All education majors	207	9	53.8	4

Top Academic Majors Sought by Employers Seeking at Least One Computer Science or IT Graduate — Bachelor’s Degree	
Degree	Academic majors selected (%)
Computer science	35
Accounting	34
Finance	33
Computer programming	31
Marketing	28
HR/LIR	27
Management information systems (B)	25
Software design	24
Management information systems (IT)	23
Information security systems	23
Computer engineering	23
Electrical engineering	21
Communications	17
Multimedia graphic design	17
Economics	17
Supply chain	17
Mechanical engineering	14
Engineering technicians	13
Public relations	13
Engineering technology	12
Psychology & Advertising	10

Academic Majors Sought by Employers Seeking at Least One Business Degree — Bachelor’s Degree	
Degree	Academic majors selected (%)
Accounting	36
Finance	33
Marketing	27
CIS	26
HR/LIR	25
Management information systems (B)	22
Computer science	22
Economics	18
Computer programming	18
Communications	17
Management information systems (IT)	16
Supply chain	16
Electrical engineering	16
Software design	15
Information security systems	15
Computer engineering	14
Public relations	12
Multimedia graphic design	11
Mechanical engineering	11
Psychology	10
Advertising	10

**Top Academic Majors Sought by Employers Seeking at Least One Engineering Graduate — Bachelor's Degree**

Degree	Academic majors selected (%)
Electrical engineering	35
CIS	31
Computer science	29
Accounting	28
Finance	28
Mechanical engineering	27
Computer programming	24
Engineering technology	23
Marketing	23
Engineering technicians	23
Human resources	23
Computer engineering	21
Industrial engineering	21
Software design	20
Management information systems (IT)	20
Civil engineering	20
General engineering	20
Management information systems (B)	20
Supply chain	20
Information security systems	19
Chemical engineering	14
Communications	13
Economics	13
Construction management	12
Multimedia, graphic design	12
Environmental engineering	12

**Top Academic Majors Sought by Employers Seeking at Least One Physical or Biological Science Graduate — Bachelor's Degree**

Degree	Academic majors selected (%)
Computer science	29
Finance	27
Accounting	27
CIS	26
Computer programming	22
Marketing	22
Human resources	22
Electrical engineering	20
Management information systems (B)	20
Computer engineering	19
Software development	19
Communication	18
Economics	18
Mathematics	17
Information security systems	17
Management information systems (IT)	17
Supply chain	15
Mechanical engineering	15
Chemistry	14
Statistics	13
Psychology	13
Multimedia, graphic design	12
English	11
Public relations	11
Physics	10

**Academic Majors Selected by Employers Seeking at Least One Communications Degree — Bachelor's Degree**

Degree	Academic majors selected (%)
Marketing	34
Accounting	31
Finance	31
Human resources	27
CIS	27
Communications	25
Management information systems (B)	24
Computer sciences	23
Computer programming	20
Information security systems	19
Public relations	18
Software design	18
Management information systems (IT)	18
Economics	16
Multimedia, graphic design	16
Computer engineering	15
Electrical engineering	15
Supply chain	15
Advertising	13
Psychology	12

**Top Academic Majors Sought by Employers Seeking at Least One Social Science Graduate — Bachelor's Degree**

Degree	Academic majors selected (%)
Finance	24
Accounting	23
Communications	22
Psychology	22
Human resources	21
Marketing	20
Management information systems (IT)	20
Sociology/anthropology	18
Public relations	17
Computer science	17
Management information systems (B)	16
Computer programming	15
Economics	14
Information security systems	14
Nursing	14
English	12
Criminal justice	12
Public administration	11
Mathematics	10
Statistics	10
Software design	10

**Academic Majors Selected by Employers Seeking at Least One Agriculture or Natural Resources Degree — Bachelor's Degree**

Degree	Academic majors selected (%)
CIS	25
Finance	23
Accounting	22
Human resources	22
Computer science	21
Marketing	21
Environment science	20
Communications	18
Management information systems (B)	17
Computer programming	16
Information security systems	16
Environmental/geological engineering	16
Electrical engineering	16
Management information systems (IT)	15
Civil engineering	15
Supply chain	14
Chemistry	13
Economics	13
Computer engineering	13
Agricultural business	12
Public relations	12
Software design	12
Engineering technology	12
Mechanical engineering	12
Plant & crop science	11
Psychology	11
Construction management	11
Engineering technicians	11
Applied engineering	11
Mathematics	11

**Top Academic Majors Sought by Employers Seeking at Least One Arts & Humanities Graduate — Bachelor's Degree**

Degree	Academic majors selected (%)
Finance	27
Marketing	27
Accounting	26
Communications	25
Human resources	24
CIS	23
Computer science	21
Public relations	19
Computer programming	17
Psychology	16
Economics	16
English	15
Information security systems	15
Management information systems (B)	14
Management information systems (IT)	14
Computer engineering	14
Advertising	13
Software design	13
Sociology & anthropology	12
Multimedia, graphic design	12
Communications	11
Mathematics	11
Public Administration	10
Technical & professional writing	10

### Difficulty in filling positions

In this challenging labor market, we already know employers are competing for qualified candidates, encounter candidates inadequately prepared to enter the workforce, and in some cases, cannot identify enough candidates to assemble an adequate pool of talent. We asked employers to indicate where they were having the most difficulty filling positions. We grouped their options by broad disciplines or occupational groupings. In order to provide a response the employer had to be filling a position in the category.

The most difficult positions to fill are in the skilled trades; simply, there are too few candidates. Skilled medical positions (nursing, physical therapy, and specialists), scientists, and mathematicians are very difficult positions to fill. The placement of scientists high on this list is frustrating. We have been working hard to increase numbers of science majors graduating at the bachelor's level, but they tend not to be in the high demand areas, such as chemistry, physics, and mathematics. In addition, many science graduates are not adequately prepared to enter the workplace: they have performed little laboratory work or lack experience with professional practice. Too many science students with plans to pursue medical professional degrees find themselves diverted toward the workplace just before graduation when their aspirations to professional school disappear.

It is not shocking that engineering and IT positions are somewhat difficult to fill; employers have been complaining about the lack of candidates for some time. The situation is exacerbated when organizations compete for the same small pool of graduates.

Construction is riding a hiring boom because the sector is recovering from the recession. Recent weather events will add to the workforce pressures in construction when enrollments in construction management are also recovering. Construction firms can expect pressure to persist for several years until the supply of qualified candidates catches up with demand.

