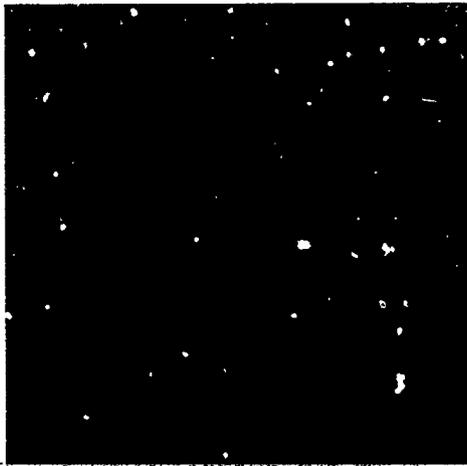
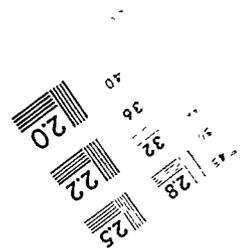
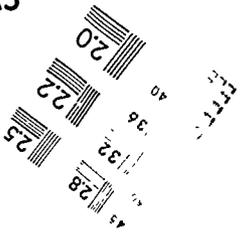


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DOCUMENT RESUME

ED 309 678

HE 022 353

AUTHOR Scheetz, L. Patrick; Gardner, Philip D.  
 TITLE Estimated Demand for Michigan's College and University Graduates of 1989.  
 INSTITUTION Michigan State Univ., East Lansing.  
 PUB DATE 25 Jan 89  
 NOTE 28p.  
 AVAILABLE FROM Collegiate Employment Research Institute, Career Development and Placement Services, 113 Student Services Building, Michigan State University, East Lansing, MI 48824-1113 (\$5.00).  
 PUB TYPE Statistical Data (110) -- Reports -- Research/Technical (143)  
 EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.  
 DESCRIPTORS Career Planning; \*College Graduates; Educational Benefits; \*Employment; Higher Education; \*Job Placement; \*Labor Market; Outcomes of Education; Program Effectiveness; State Surveys  
 IDENTIFIERS \*Michigan

ABSTRACT

Sixty-one placement and career planning professionals at Michigan's 2- and 4-year colleges and universities rated the job market for academic majors at their respective institutions. Their perceptions of the labor market were gained from a variety of sources, including campus interviewing, statistics on employer requests by major and degree level, job listings, discussions with employers, and responses to follow-ups of recent graduates. Directors of career development and placement services at each institution were sent a packet of material with surveys for each staff member. The survey contained a list of all academic programs specific to each institutions. They were asked to rate this year's expected labor market for each program they advised or were familiar with. Five tables present the results according to: summary of demand for major classification of instructional programs (CIP) groups by degree level; demand ratings for specific programs at the certificate/associate level according to CIP numbers; demand for specific programs at the bachelors level according to CIP numbers; demand ratings for specific programs at the masters level according to CIP numbers; and demand ratings for specific programs at the doctoral/professional level according to CIP numbers. Results indicate there should be a relatively stable job market this year and graduates should find good employment opportunities (though some from a few academic programs may be unhappy). (SM)

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Delta College	1	Montcalm Community College	1
Eastern Michigan University	6	Muskegon County Community College	1
Ferris State University	1	North Central Michigan College	1
Grand Rapids Junior College	1	Northern Michigan University	1
Grand Valley State College	2	Northwood Institute	1
Henry Ford Community College	1	Olivet	1
Highland Park Community College	1	Saginaw Valley State University	3
Jackson Community College	1	Siena Heights College	1
Jordan College	1	Spring Arbor College	1
Kalamazoo College	1	Suomi College	1
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Kellogg Community College	1	Walsh College of Accounting and Business	1
Kirtland Community College	1	West Shore Community College	4
Lake Superior State University	1	Western Michigan University	2

Also appreciated were the efforts of William P. Mattes, a research aide with the Institute, who assisted with the collection of data, analysis of returns, and distribution of this final report.

Career Development and Placement Services  
 Division of Student Affairs and Services  
 Thomas D. Luten  
 Director  
 Michigan State University  
 113 Student Services Building  
 East Lansing, Michigan 48824-1113

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Price \$5.00

## Estimated Demand for Michigan's College and University Graduates of 1989

Several efforts are made each year to assess the short-term labor market for college graduates. One effort, the Recruiting Trends report, focused on the expectations of employers from major business, industry, government, and educational institutions when recruiting on college campuses. Results from the latest edition of this study have indicated that employment opportunities will increase modestly (by approximately 3.1%) in 1989.

In the second study, placement and career planning professionals at Michigan's two and four-year colleges and universities rated the job market for academic majors at their respective institutions. Their perceptions of the labor market were gained from a variety of sources, including campus interviewing statistics on employer requests by major and degree level, job listings, discussions with employers, responses to follow-ups of recent graduates, and other reliable sources.

### Participants

Directors of career development and placement services at every Michigan two- and four-year campus were sent a packet of material that contained instructions and surveys for each member of their staff. Sixty-one (61) professionals, representing 42 institutions, returned surveys. The institutional composition of the respondents was 40% (17) two-year institutions, 31% (13) private four-year institutions, and 29% (12) four-year public institutions.

### Survey

The survey contained a list of all academic programs specific to each institution. The programs were listed according to the classification of instructional programs (CIP) code that the Michigan State Board of Education uses to group programs of similar program content. Placement professionals were asked to rate this year's expected labor market for each program they advised or were familiar with employment conditions. The five-point Likert rating scale ranged from 1- surplus job market (more college graduates than jobs available) to 5 - excellent job market (more job opportunities than college graduates available). Provision was made for rating programs where graduates typically continue their education at a different academic level: particularly appropriate for selected two-year graduates who continue at a four-year institution.

### Results

Average ratings for the fifty major CIP groups are reported in Table 1 and the specific programs for each degree level are presented in Tables 2 to 4, respectively. Academic programs with the same CIP numbers have been aggregated, even if the program titles varied between institutions. Programs where only a few respondents (one to five) have reported ratings have not been collapsed into a composite code because the content of individual programs may vary widely between institutions. All ratings have been included for completeness; however, readers should exercise care when generalizing from specific ratings where the number of respondents is small.

The rating means can be interpreted as follows:

Means	Implication
$\geq 4.50$	Many more job opportunities than graduates available.
3.51-4.49	Slightly more job opportunities than graduates available.
2.51-3.50	About as many jobs available as graduates.
1.51-2.50	Slightly more graduates than available jobs.
$\leq 1.50$	Many more graduates than available jobs.

Consistent with this year, results from surveys of employers, placement professionals expect a relatively stable job market this year, performing as well as or slightly better than last year. Ratings tended to fall between 2.5 and 4.0, suggesting that graduates can expect to find good employment opportunities. However, some graduates from a few academic programs may be unhappy with their options.

A thorough comparison with last year's ratings was limited because the mix of respondents differed slightly from last year. Generally, there appeared to be very little change in the ratings from the previous year. Engineering, technical fields, mathematics, business, and health services continue to experience a strong labor market. A noticeable upward movement in the ratings for many liberal arts and social science majors was observed. This particular trend in the liberal arts programs matches expectations of other observers of the college labor market who expect liberal arts graduates to do better in the labor market over the next several years.

Since ratings reflect the demand within a specific field of study, graduates in programs that received low ratings need to pursue a comprehensive job search. Consideration needs to be given to a wider array of potential job opportunities where their skills can be applied. To pursue a wider range of employment opportunities, graduates need to utilize job search strategies, such as networking, that can allow them to remain flexible.

**Table 1: Summary of Demand for Major CIP Groups by Degree Level**

CIP	Program Name	Certificate\			
		Associate	Bachelor	Master	Doctoral\ Professional
0	Apprentice Training	2.50	N/A	N/A	N/A
1	Agribusiness and Agricultural Production	3.00	3.00	N/A	N/A
2	Agricultural Sciences	3.00	3.00	N/A	N/A
3	Renewable Natural Resources	2.25	2.69	3.50	N/A
4	Architecture and Environmental Design	3.00	2.14	N/A	N/A
5	Area and Ethnic Studies	N/A	1.39	1.50	N/A
6	Business Management	3.18	3.29	3.49	5.00
7	Business and Office	N/A	3.47	N/A	N/A
8	Marketing and Distribution	3.35	3.79	N/A	N/A
9	Communications	2.25	2.13	2.30	N/A
10	Communication Technologies	3.00	3.50	N/A	N/A
11	Computer and Information Sciences	3.41	3.77	3.70	5.00
12	Consumer, Personal, and Miscellaneous Services	2.75	3.00	N/A	N/A
13	Education	2.59	2.70	3.03	3.24
14	Engineering	3.10	3.54	3.88	4.33
15	Engineering and Engineering - Related Technologies	3.66	3.18	N/A	N/A
16	Foreign Languages	2.67	1.85	1.71	2.00
17	Allied Health	4.03	3.89	4.14	N/A
18	Health Services	4.50	3.73	N/A	4.87
19	Home Economics	2.50	2.86	N/A	N/A
20	Vocational Home Economics	4.07	2.84	2.00	N/A
21	Industrial Arts	2.80	3.38	N/A	N/A
22	Law	3.13	3.75	3.81	4.50
23	Letters	2.29	2.31	1.93	2.00
24	Liberal\General Studies	2.55	1.58	N/A	N/A
25	Library and Archival Sciences	3.00	4.00	3.71	3.00
26	Life Sciences	3.00	2.56	3.30	3.94
27	Mathematics	3.50	4.71	3.33	3.67
30	Multi\Interdisciplinary Studies	2.00	2.06	1.00	N/A
31	Parks and Recreation	3.00	2.87	2.00	N/A
32	Basic Skills	N/A	5.00	N/A	N/A
34	Health and Related Activities	3.00	N/A	2.50	N/A
38	Philosophy and Religion	CB	1.91	1.50	2.00
39	Theology	3.00	3.00	N/A	N/A
40	Physical Sciences	2.88	3.15	3.40	3.82
41	Science Technologies	N/A	4.67	N/A	N/A
42	Psychology	3.00	2.50	2.95	3.00
43	Protective Services	3.44	2.87	3.00	N/A
44	Public Affairs	2.60	2.79	2.78	3.50
45	Social Sciences	2.00	2.03	1.70	2.20
46	Public Affairs	2.86	N/A	N/A	N/A
47	Social Sciences	3.30	N/A	N/A	N/A
48	Precision Production	3.35	3.00	N/A	N/A
49	Transportation and Material Moving	4.17	N/A	N/A	N/A
50	Visual and Performing Arts	1.63	2.07	1.58	2.50

N/A not applicable - no data reported

**Means**

- ≥ 4.50
- 3.51 - 4.49
- 2.51 - 3.50
- 1.51 - 2.50
- ≤ 1.50

**Implications**

- Many more job opportunities than graduates available.
- Slightly more job opportunities than graduates available.
- About as many jobs available as graduates.
- Slightly more graduates than available jobs.
- Many more graduates than available jobs.

**Table 2: Demand Ratings for Specific Programs at the Certificate/Associate Level According to CIP Numbers**

CIP	Program Name	Average Respondents		CIP	Program Name	Average Respondents	
0.0000	Apprentice Training			7.0000	Business and Office		
0.0000	Apprenticeship	2.50	2	7.0606	Secretarial Studies	4.00	12
1.0000	Agribusiness and Agricultural Production			7.0607	Stenographic	4.33	3
1.9999	Agricultural Technology	3.00	1	7.0608	Word Processing	3.78	18
2.0000	Agricultural Sciences			7.0699	Secretarial and Related Programs	3.00	3
2.0404	Ornamental Horticulture Tech	5.00	1	7.0.01	Typing, General Office, and Related Programs	4.33	3
2.0501	Crop and Soil Science	1.00	1	7.0702	Clerk Typist	3.20	5
3.0000	Renewable Natural Resources			7.0705	General Office Clerk	3.00	8
3.0101	Renewable Natural Resources	2.00	3	7.0707	Receptionist and Communication Systems Operat	5.00	1
3.0401	Forestry Production and Processing	2.41	5	7.0710	Typing	5.00	1
4.0000	Architecture and Environmental Design			7.9999	Business and Office	2.00	1
4.0201	Architecture	4.00	1	8.0000	Marketing and Distribution		
4.0301	Urban Planning	4.00	1	8.0102	Fashion Merchandising	3.50	6
4.0501	Interior Design	2.00	3	8.0402	Banking Marketing	2.00	1
4.0601	Landscape Architecture	4.00	1	8.0705	Retailing	4.00	4
6.0000	Business Management			8.0706	Sales	5.00	2
6.0201	Accounting	3.80	10	8.0799	General Marketing	3.17	6
6.0301	Banking and Finance	3.33	3	8.0807	Office Products and Equipment Marketing	3.00	1
6.0401	Business Administration and Management	2.85	26	8.1104	Tourism	2.33	3
6.0701	Hotel/Motel Management	4.00	5	8.1199	Transportation and Travel Marketing	1.00	1
6.0704	Restaurant Management	5.00	1	8.1203	Automotive Vehicles and Accessories Marketing	4.00	2
6.0705	Transportation Management	4.00	1	9.0000	Communications		
6.1101	Labor/Industrial Relations	1.00	1	9.0201	Advertising	1.00	2
6.1401	Marketing Management	3.40	5	9.0401	Journalism	1.50	4
6.1601	Personnel Management	1.00	1	9.0501	Public Relations	3.00	1
6.1701	Real Estate	2.00	2	9.0601	Radio/Television News Broadcast	4.00	1
6.1704	Real Estate Appraisal	3.00	1	9.9999	Communications	3.00	1
6.1801	Small Business Management	2.00	1	10.0000	Communication Technologies		
6.2001	Trade and Industrial Supervision and Mgt.	4.00	1	10.0103	Photography Technology	3.00	1
6.9999	Data Processing and Management	3.00	1	10.0199	Communication Technology	3.00	1
7.0000	Business and Office			11.0000	Computer and Information Sciences		
7.0101	Accounting, Bookkeeping, and Related Programs	3.60	5	11.0101	Computer and Information Science	3.38	8
7.0102	Accounting and Computing	3.33	6	11.0201	Computer Programming	2.75	4
7.0103	Bookkeeper	2.00	1	11.0301	Data Processing	4.25	4
7.0201	Banking and Related Financial Programs	3.00	1	11.0401	Information Sciences and Systems	3.67	3
7.0301	Business Data Processing and Related Programs	2.92	12	11.9999	Computer and Information Science	3.00	3
7.0302	Business Computer and Console Operations	3.75	4	12.0000	Consumer, Personal, and Miscellaneous Services		
7.0305	Business Data Programming	3.00	3	12.0301	Mortuary Science	3.50	2
7.0306	Business Systems Analysis	3.00	1	12.0401	Personal Services	3.00	1
7.0399	Business Data Processing and Related Programs	3.00	3	12.0403	Cosmetology	2.50	4
7.0401	Office Supervision and Management	3.70	10	12.0499	Personal Services	2.00	1
7.0601	Secretarial and Related Programs	4.00	4	13.0000	Education		
7.0602	Court Reporting	4.00	2	13.1001	Special Education	3.00	1
7.0603	Executive Secretary	4.00	11	13.1202	Elementary Education	2.60	5
7.0604	Legal Secretary	4.00	14	13.1204	Pre-Elementary Education	3.00	1
7.0605	Medical Secretary	4.00	15	13.1205	Secondary Education	2.67	3

**Means**

- ≥ 4.50
- 3.51 - 4.49
- 2.51 - 3.50
- 1.51 - 2.50
- ≤ 1.50

**Implications**

- Many more job opportunities than graduates available.
- Slightly more job opportunities than graduates available.
- About as many jobs available as graduates.
- Slightly more graduates than available jobs.
- Many more graduates than available jobs.

**Table 2: (Continued) Demand Ratings for Specific Programs at the Certificate/Associate Level According to CIP Numbers**

CIP	Program Name	Average	Respondents	CIP	Program Name	Average	Respondents
13.0000	Education (continued)			16.0000	Foreign Languages		
13.1302	Art Education	2.50	2	16.0101	Foreign Languages, Multiple Emphasis	2.67	3
13.1303	Business Education	2.80	5	17.0000	Allied Health		
13.1305	English Education	2.00	2	17.0101	Dental Assistant	4.25	4
13.1306	Foreign Languages Education	3.00	1	17.0102	Dental Hygiene	4.80	5
13.1309	Industrial Education	2.50	2	17.0103	Dental Laboratory Technology	4.00	1
13.1311	Mathematics Education	3.00	1	17.0201	Cardiopulmonary Technology	4.00	2
13.1312	Music Education	2.00	1	17.0205	Emergency Medical Technology-Ambulance	3.33	3
13.1314	Physical Education	2.25	4	17.0206	Emergency Medical Technology-Paramedic	4.00	1
13.1316	Science Education	3.00	3	17.0208	Nuclear Medicine Technician	5.00	1
13.1399	Teacher Education, Specific Subject Areas	2.00	1	17.0209	Radiograph Medical Technology	3.86	7
14.0000	Engineering			17.0210	Respiratory Therapy Technician	4.17	6
14.0101	Engineering	3.40	5	17.0211	Surgical Technology	4.00	2
14.0701	Chemical Engineering	4.00	1	17.0212	Ultrasound Technology	3.00	1
14.0801	Civil Engineering	2.67	3	17.0309	Medical Laboratory Technician	3.67	6
14.0901	Computer Engineering	3.00	1	17.0310	Medical Technology	3.00	3
14.1001	Electrical, Electronics, and Comm. Eng.	3.00	4	17.0401	Alcohol and Drug Abuse	5.00	1
14.1701	Industrial Engineering	2.00	1	17.0405	Mental Health\Human Services Assisting	3.00	1
14.1901	Mechanical Engineering	3.25	4	17.0406	Mental Health\Human Services Technology	2.00	1
14.9999	Engineering, Other	3.00	1	17.0503	Medical Assistant	4.00	8
15.0000	Engineering and Engineering-Related Technologies			17.0505	Medical Office Management	3.50	2
15.0101	Architectural Design and Construction Tech.	3.17	6	17.0506	Medical Record Technology	4.25	4
15.0201	Civil Technology	3.00	2	17.0599	Medical Transcriptionist	3.00	2
15.0202	Drafting and Design Technology	4.35	17	17.0602	Nurse Assisting	4.00	1
15.0203	Surveying and Mapping Technology	5.00	2	17.0605	Practical Nursing	4.36	14
15.0301	Computer Systems Technology	3.50	2	17.0701	Ophthalmic Dispensing	5.00	1
15.0303	Electronic Technology	3.47	17	17.0705	Optometric Technology	5.00	1
15.0399	Electrical and Electronic Technology	2.67	3	17.0807	Occupational Therapy	4.00	1
15.0402	Computer Servicing Technology	3.50	4	17.0808	Occupational Therapy Assisting	4.00	1
15.0403	Electromechanical Technology	3.00	1	17.0813	Physical Therapy	3.00	2
15.0404	Instrumentation Technology	3.00	1	17.0815	Physical Therapy Assisting	5.00	1
15.0501	Air Conditioning, Heating, and Refrig. Tech.	3.00	6	17.0818	Respiratory Therapy	5.00	3
15.0504	Sanitation Technology	4.00	1	18.0000	Health Services		
15.0506	Water and Wastewater Technology	4.50	2	18.0101	Audiology	5.00	1
15.0601	Chemical Manufacturing Technology	4.50	2	18.0701	Health Care Administration	5.00	1
15.0602	Food Processing Technology	3.00	1	18.1020	Physical Medicine and Rehabilitation	3.00	1
15.0603	Industrial Technology	3.40	10	18.1101	Nursing	4.67	21
15.0604	Manufacturing Technology	4.60	5	18.1201	Optometry	3.00	1
15.0607	Plastics Technology	5.00	2	18.1701	Pre Dental	1.50	2
15.0610	Welding Technology	2.73	15	18.1801	Pre Medical	3.00	1
15.0699	Industrial Production Technologies	5.00	2	18.1901	Pre Pharmacy	3.00	1
15.0701	Occupational Health and Safety Technology	2.00	1	18.2001	Pre Veterinary	3.00	1
15.0702	Quality Control Technology	4.50	2	19.0000	Home Economics		
15.0801	Aeronautical Technology	4.00	1	19.0503	Dietetics\Human Nutritional Services	3.00	1
15.0803	Automotive Technology	4.29	14	20.0000	Vocational Home Economics		
15.0805	Mechanical Design Technology	4.00	1	20.0102	Child Development, Care, and Guidance	3.50	6
15.0899	Mechanical and Related Technologies	3.00	2	20.0201	Child Care and Guidance Management	4.00	2
15.0903	Petroleum Technology	2.00	1	20.0202	Child Care Technology	4.60	5
15.9999	Engineering and Engineering-Related Tech.	3.00	2	20.0401	Food Production, Service, and Management	4.00	2
				20.0403	Chef\Cook	4.33	3

**Means**

- ≥ 4.50
- 3.51 - 4.49
- 2.51 - 3.50
- 1.51 - 2.50
- ≤ 1.50

**Implications**

- Many more job opportunities than graduates available.
- Slightly more job opportunities than graduates available.
- About as many jobs available as graduates.
- Slightly more graduates than available jobs.
- Many more graduates than available jobs.

**Table 2: (Continued) Demand Ratings for Specific Programs at the Certificate/Associate Level According to CIP Numbers**

CIP	Program Name	Average Respondents		CIP	Program Name	Average Respondents	
20.0000	Vocational Home Economics (continued)			43.0000	Protective Services (continued)		
20.0406	Food Service	4.25	8	43.0109	Security Services	2.00	1
20.0501	Home Furnish. & Equip., Mgt., Prod., & Serv.	3.00	1	43.0199	Criminal Justice - Protective Services	3.67	3
21.0000	Industrial Arts			43.0201	Fire Science	2.50	4
21.0106	Graphic Arts	1.00	1	44.0000	Public Affairs		
21.0108	Industrial Machine Tool	3.00	1	44.0401	Public Administration	3.00	1
21.0109	Industrial Millwright	3.00	1	44.0701	Social Work	2.89	9
21.0110	Industrial Plumber \ Pipefitter	3.00	1	45.0000	Social Sciences		
21.0111	Industrial Sheet Metal	4.00	1	45.0101	Social Science	2.00	1
22.0000	Law			45.0601	Economics	1.00	2
22.0102	Pre Law	3.00	1	45.0801	History	1.00	2
22.0103	Legal Assistant	3.14	7	45.1001	Political Science and Government	2.00	1
23.0000	Letters			45.1101	Sociology	2.00	1
23.0101	English	2.50	4	46.0000	Public Affairs		
23.1001	Speech, Debate, and Forensics	2.00	3	46.0201	Carpentry	3.00	1
24.0000	Liberal\General Studies			46.0302	Electrical Technology	3.00	4
24.0101	Pre - Science	2.33	12	46.0502	Pipefitting and Steamfitting	3.00	1
25.0000	Library and Archival Sciences			46.9999	Industrial Construction	2.00	1
25.0101	Library and Archival Science	3.00	1	47.0000	Social Sciences		
26.0000	Life Sciences			47.0101	Electrical and Electronics Equipment Repair	4.00	1
26.0101	Biology Science	3.00	3	47.0105	Industrial Electronics	3.00	1
26.9999	Pre-Professional Science	3.00	1	47.0105	Appliance Service and Repair	2.00	1
27.0000	Mathematics			47.0199	Radio & TV Servicing	3.00	1
27.0101	Mathematics	3.50	2	47.0201	Refrigeration, Air Conditioning, Heating	3.50	4
30.0000	Multi\Interdisciplinary Studies			47.0301	Industrial Maintenance and Repair	3.00	1
30.0101	Biological and Physical Sciences	2.00	1	47.0302	Heavy Equipment Maintenance and Repair	3.00	8
30.0401	Humanities and Social Sciences	2.00	2	47.0303	Industrial Equipment Maintenance and Repair	4.00	1
30.9999	General Studies	2.00	1	47.0602	Aircraft Mechanics	4.00	2
31.0000	Parks and Recreation			47.0603	Automotive Body Repair	2.67	3
31.0201	Outdoor Recreation	3.00	1	47.0604	Automotive Mechanics	3.75	12
31.0301	Parks and Recreation Management	3.00	1	47.0605	Diesel Engine Mechanics	3.00	2
34.0000	Health and Related Activities			47.0606	Small Engine Repair	3.00	1
34.0101	Health Related Activities	3.00	1	47.9999	General Technology	4.00	1
38.0000	Philosophy and Religion			48.0000	Precision Production		
39.0601	Theological Studies	1.50	2	48.0101	Drafting	3.40	5
40.0000	Physical Sciences			48.0102	Architectural Drafting	4.00	1
40.0101	Liberal Arts Physical Science	3.00	1	48.0105	Mechanical Drafting	3.43	7
40.0501	Chemistry	4.00	3	48.0199	Tool and Die Drafter	4.00	1
40.0601	Geology	2.00	1	48.0201	Graphic and Printing Communications	2.50	2
40.0702	Oceanography	2.00	1	48.0203	Commercial Art	3.00	4
40.0801	Physics	3.00	1	48.0402	Heat Cutter	3.00	1
42.0000	Psychology			48.0503	Machine Tool Operation\Machine Shop	3.55	20
42.0101	Psychology	3.00	2	48.0504	Metal Fabrication	2.00	1
43.0000	Protective Services			48.0506	Sheet Metal	3.00	1
43.0102	Corrections	4.43	7	48.0507	Tool and Die Making	5.00	1
43.0103	Criminal Justice Administration	3.50	2	48.0508	Welding, Brazing, and Soldering	3.00	6
43.0104	Criminal Justice Studies	3.33	6	48.0604	Plastics	4.00	1
43.0105	Criminal Justice Technology	3.67	6	48.0701	Woodworking	2.00	1
43.0107	Law Enforcement	3.30	10	49.0000	Transportation and Material Moving		
43.0108	Law Enforcement Administration	2.00	1	49.0102	Aviation Technology	4.00	3

**Means**

- ≥ 4.50
- 3.51 - 4.49
- 2.51 - 3.50
- 1.51 - 2.50
- ≤ 1.50

**Implications**

- Many more job opportunities than graduates available.
- Slightly more job opportunities than graduates available.
- About as many jobs available as graduates.
- Slightly more graduates than available jobs.
- Many more graduates than available jobs.

**Table 2: (Continued) Demand Ratings for Specific Programs at the Certificate/Associate Level According to CIP Numbers**

CIP	Program Name	Average Respondents		CIP	Program Name	Average Respondents	
49.0000	Transportation and Material Moving (continued)			50.0000	Visual and Performing Arts (continued)		
49.0307	Maritime Engine Officer	5.00	2	50.0501	Dramatic Arts	1.00	2
49.9999	Transportation Training	3.00	1	50.0701	Fine Arts	1.67	6
50.0000	Visual and Performing Arts			50.0708	Art - Painting & Drawing	1.00	1
50.0201	Crafts	1.50	2	50.0901	Music	1.50	2
50.0301	Dance	1.00	2	50.0902	Music History and Appreciation	1.00	1
50.0402	Graphic Design	2.00	1	50.0904	Music Theory and Composition	1.00	1
50.0403	Illustration Design	3.00	1	50.0999	Jazz Studies	1.00	1
50.0404	Industrial Design	3.00	1				

**Means**

- ≥ 4.50
- 3.51 - 4.49
- 2.51 - 3.50
- 1.51 - 2.50
- ≤ 1.50

**Implications**

- Many more job opportunities than graduates available.
- Slightly more job opportunities than graduates available.
- About as many jobs available as graduates.
- Slightly more graduates than available jobs.
- Many more graduates than available jobs.

**Table 3: Demand Ratings for Specific Programs at the Bachelor Level  
According to CIP Numbers**

CIP	Program Name	Average Respondents	CIP	Program Name	Average Respondents
1.0000	Agribusiness and Agricultural Production		6.0000	Business Management (continued)	
1.0102	Agricultural Business	3.00 1	6.1801	Small Business Management	2.00 1
1.9999	Packaging	3.00 2	6.2001	Trade and Industrial Supervision and Mgt.	3.00 7
2.0000	Agricultural Sciences		6.9999	Business Computer Systems	3.15 13
2.0303	Food Distribution	3.00 1	7.0000	Business and Office	
3.0000	Renewable Natural Resources		7.0306	Business Systems Analysis	3.00 1
3.0101	Natural Resources	2.00 2	7.0399	Business/Data Processing	4.00 1
3.0202	Conservation	2.00 1	7.0401	Office Services	3.44 9
3.0502	Fisheries	2.00 2	7.0602	Court Reporting	5.00 1
3.0501	Forestry and Related Sciences	3.33 6	7.0603	Executive Assistant	3.00 2
3.9999	Planning and Resource Management	2.50 2	7.0604	Legal Assistant	4.00 1
4.0000	Architecture and Environmental Design		7.0608	Word Processing	3.00 1
4.0201	Architecture	2.00 1	7.9999	Records Management Systems	3.00 1
4.0301	Planning	2.00 4	8.0000	Marketing and Distribution	
4.0401	Environmental Design	2.00 1	8.0102	Fashion Merchandising	3.71 7
4.0501	Interior Design	2.25 8	8.0201	Business Administration/Marketing	3.00 1
5.0000	Area and Ethnic Studies		8.0702	Industrial Sales	4.00 3
5.0101	African Studies	1.00 1	8.0705	Retailing	4.00 3
5.0102	American Studies	1.20 5	8.0706	Sales	4.00 1
5.0110	Russian and Slavic Studies	1.00 1	8.0901	Hospitality and Recreation Marketing	5.00 2
5.0199	International and Area Studies	2.00 5	8.0903	Marketing of Recreational Services	3.50 2
5.0201	Black Studies	1.00 3	8.1001	Insurance Marketing	4.00 2
5.0203	Hispanic-American Studies	1.33 3	8.1104	Tourism and Travel	3.00 1
6.0000	Business Management		8.1201	Petroleum Distribution	3.00 1
6.0101	General Business	2.93 8	8.9999	Food Systems Economy and Management	3.00 1
6.0200	Business Administration/Accounting	4.00 1	9.0000	Communications	
6.0201	Accounting	4.33 27	9.0101	Communication, General	2.00 5
6.0301	Banking and Finance	3.48 21	9.0201	Advertising	1.86 7
6.0401	Business Administration and Management	2.93 42	9.0401	Journalism	2.08 12
6.0403	Product Management	3.50 2	9.0501	Public Relations	1.67 3
6.0499	Business Administration Insurance	3.00 7	9.0601	Communications - Radio/Television	3.00 1
6.0501	Business Economics	2.82 11	9.0701	Broadcasting	1.78 9
6.0701	Hotel/Hotel Management	4.75 4	9.9900	Communications - Graphic Arts	4.00 1
6.0702	Recreation Management	3.00 2	9.9999	Mass Communications Concentration	2.86 7
6.0801	Insurance and Risk Management	4.00 1	10.0000	Communication Technologies	
6.0901	International Business Management	1.67 3	10.0100	Communicative Technology	3.00 1
6.1101	Labor/Industrial Relations	2.00 2	10.0104	Radio/Television Production	3.00 1
6.1201	Management Information Systems	2.00 1	10.0199	Scientific & Technical Communications	4.00 2
6.1301	Business Statistics	3.75 4	11.0000	Computer and Information Sciences	
6.1302	Operations Research	3.40 5	11.0101	Computer and Information Sciences	3.61 28
6.1399	Management Science, Other	2.00 1	11.0301	Data Processing	3.20 5
6.1401	Marketing Management	3.73 26	11.0401	Information Sciences and Systems	4.00 1
6.1409	Marketing	3.75 4	11.0501	Systems Analysis	5.00 1
6.1501	Organizational Behavior	2.67 3	11.9999	Accounting Information Systems	4.25 12
6.1601	Personnel Management	2.40 10	12.0000	Consumer, Personal, and Miscellaneous Services	
6.1701	Real Estate	2.60 5	12.0301	Hortuary Science	3.00 3

**Means**

≥ 4.50  
3.51 - 4.49  
2.51 - 3.50  
1.51 - 2.50  
≤ 1.50

**Implications**

Many more job opportunities than graduates available.  
Slightly more job opportunities than graduates available.  
About as many jobs available as graduates.  
Slightly more graduates than available jobs.  
Many more graduates than available jobs.

**Table 3: (Continued) Demand Ratings for Specific Programs at the Bachelor Level According to CIP Numbers**

CIP	Program Name	Average	Respondents	CIP	Program Name	Average	Respondents
13.0000	Education			14.0000	Engineering (continued)		
13.0101	Education	2.00	5	14.2501	Petroleum Engineering	2.50	4
13.1003	Education of the Deaf and Hearing Impaired	4.00	3	14.9999	Paper Engineering	3.33	3
13.1005	Education of the Emotionally Handicapped	4.43	3	15.0000	Engineering and Engineering - Related Technologies		
13.1006	Education of the Mentally Handicapped	4.38	8	15.0101	Architectural Design and Construction Tech.	1.00	1
13.1008	Education of the Physically Handicapped	3.75	4	15.0201	Civil Technology	4.50	2
13.1009	Education of the Visually Handicapped	3.75	4	15.0202	Drafting and Design Technology	3.00	2
13.1011	Specific Learning Disabilities	4.50	2	15.0203	Surveying and Mapping Technology	5.00	1
13.1012	Speech Correction	3.43	7	15.0302	Electrical Technology	3.00	4
13.1101	Student Counseling and Personnel Services	2.50	4	15.0303	Electronic Technology	2.50	2
13.1201	Adult and Continuing Education	1.50	2	15.0399	Electrical and Electronic Technologies	3.00	3
13.1202	Elementary Education	2.25	20	15.0401	Biomedical Equipment Technology	3.00	2
13.1203	Junior High Education	3.00	1	15.0403	Electromechanical Technology	3.00	4
13.1204	Education - Early Childhood	2.50	6	15.0404	Instrumentation Technology	4.00	1
13.1205	Secondary Education	2.50	6	15.0503	Energy Management	3.00	2
13.1301	Agricultural Education	3.00	2	15.0504	Sanitation Technology	3.67	3
13.1302	Art Education	1.76	17	15.0505	Alternate Energy	2.00	2
13.1303	Business Education	2.95	22	15.0599	Environmental Control Technologies	4.00	2
13.1306	Foreign Education	2.14	14	15.0603	Industrial Technology	2.38	8
13.1305	English Education	2.00	6	15.0604	Manufacturing Technology	3.00	4
13.1307	Health Education	2.18	11	15.0607	Plastic Technology	4.00	3
13.1308	Home Economics Education	2.13	8	15.0610	Welding Technology	4.00	1
13.1309	Industrial Arts Education	2.59	17	15.0699	Industrial Production Technologies	4.25	4
13.1310	Marketing and Distributive Education	3.25	4	15.0701	Occupational Safety and Health Technology	4.00	2
13.1311	Mathematics Education	3.70	10	15.0801	Aeronautical Technology	3.00	1
13.1312	Music Education	2.71	17	15.0803	Automotive Technology	4.00	1
13.1314	Physical Education	1.67	30	15.0805	Mechanical Design Technology	2.00	1
13.1315	Reading Education	3.00	2	15.0899	Mechanical Engineering Technology	3.00	3
13.1316	Science Education	3.42	24	15.9999	Mining and Petroleum Technologies	3.00	2
13.1317	Social Science Education	1.50	8	16.0000	Foreign Languages		
13.1318	Social Studies Education	1.88	8	16.0301	Chinese	2.00	1
13.1319	Technical Education	3.20	5	16.0302	Japanese	3.00	1
13.1320	Trade and Industrial Education	2.00	1	16.0402	Russian	1.75	4
13.1399	Teacher Education, Specific Subject Areas	3.43	7	16.0403	Slavic Languages (other than Russian)	1.50	8
13.9999	Mental Retardation Education	4.00	1	16.0501	German	1.88	17
14.0000	Engineering			16.0601	Greek (Classical)	1.20	5
14.0101	Engineering (Consortium)	3.70	10	16.0602	Greek (modern)	1.20	5
14.0201	Aircraft Engineering	3.00	1	16.0901	French	1.95	22
14.0701	Chemical Engineering	3.57	14	16.0902	Italian	1.50	4
14.0801	Civil Engineering	3.06	16	16.0903	Latin	1.43	7
14.0901	Computer Systems Engineering	3.00	1	16.0905	Spanish	2.50	22
14.1001	Electrical Engineering	3.79	24	16.1101	Arabic	1.75	4
14.1301	Engineering Science	4.00	1	16.1102	Hebrew	1.25	4
14.1401	Environmental Health Engineering	4.50	2	16.9999	Language and International Trade	1.50	4
14.1501	Geological Engineering	3.00	8	17.0000	Allied Health		
14.1701	Industrial Engineering	3.29	7	17.0205	Emergency Medical Technician	3.00	1
14.1801	Materials Engineering	4.33	3	17.0208	Nuclear Medical Technology	5.00	1
14.1901	Mechanical Engineering	3.65	26	17.0209	Radiograph Medical Technology	4.75	4
14.2001	Metallurgical Engineering	4.00	11	17.0301	Blood Bank Technology	5.00	1
14.2101	Mining and Mineral Engineering	3.33	6	17.0309	Medical Laboratory Technology	4.00	1

**Means**

- ≥ 4.50
- 3.51 - 4.49
- 2.51 - 3.50
- 1.51 - 2.50
- 1.50

**Implications**

- Many more job opportunities than graduates available.
- Slightly more job opportunities than graduates available.
- About as many jobs available as graduates.
- Slightly more graduates than available jobs.
- Many more graduates than available jobs.

**Table 3: (Continued) Demand Ratings for Specific Programs at the Bachelor Level According to CIP Numbers**

CIP	Program Name	Average Respondents		CIP	Program Name	Average Respondents	
17.0000	Allied Health (continued)			21.0000	Industrial Arts		
17.0310	Medical Technology	3.50	14	21.0101	Industrial Arts	3.00	1
17.0401	Alcohol and Drug Abuse	5.00	1	21.0102	Construction	4.00	1
17.0499	Mental Health/Human Services	4.00	3	21.0103	Drafting and Design	4.00	1
17.0508	Physicians Assistant	5.00	1	21.0105	Energy, Power, and Transportation	3.00	1
17.0599	Sports Medicine	1.50	2	21.0106	Graphic Arts	4.00	1
17.0799	Pre Optometry	3.00	2	21.0199	Metalworking	3.00	3
17.0804	Exercise Physiology	3.00	2	22.0000	Law		
17.0806	Music Therapy	3.00	1	22.0102	Pre-Law	3.00	1
17.0807	Occupational Therapy	4.50	8	22.0103	Legal Assisting	4.00	2
17.0813	Physical Therapy	4.67	6	22.0199	Legal Administration	4.00	1
17.0816	Recreational Therapy	4.00	2	23.0000	Letters		
17.0821	Speech Language Pathology Audiology	3.00	3	23.0101	English	2.61	31
18.0000	Health Services			23.0201	Classics	1.00	4
18.0199	Audiology and Speech Pathology	3.00	1	23.0601	Language Arts	2.33	3
18.0299	Basic Clinical Health Sciences	1.00	1	23.0701	American Literature	2.00	1
18.0401	Dentistry	4.00	1	23.0801	Literature, English	1.60	5
18.0701	Health Care Administration	2.00	5	23.1001	Speech, Debate, and Forensics	2.20	5
18.0703	Medical Records Administration	4.00	2	23.1101	Technical and Business Writing	3.00	1
18.0799	Health Sciences Administration	4.00	1	23.9999	Communication Arts	2.00	1
18.0901	Medical Laboratory	3.50	2	24.0000	Liberal\General Studies		
18.1008	Geriatrics	4.00	1	24.0101	Liberal\General Studies	1.86	7
18.1099	Medicine 3-1 Program	4.00	1	24.0199	Behavioral Science	1.20	5
18.1101	Professional Nursing	4.86	21	25.0000	Library and Archival Sciences		
18.1401	Pharmacy	4.75	4	25.0401	Library Science	4.00	3
18.1701	Pre-Dentistry	3.60	5	26.0000	Life Sciences		
18.1801	Pre-Medicine	3.80	5	26.0101	Biology	2.50	34
18.1901	Pre-Pharmacy	2.33	3	26.0201	Biochemistry and Biophysics	3.20	15
18.9999	Athletic Training	2.78	9	26.0301	Botany	2.00	1
19.0000	Home Economics			26.0307	Plant Physiology	1.50	2
19.0101	General Home Economics	2.89	9	26.0501	Microbiology	2.40	5
19.0200	Home Economics in Business	1.00	1	26.0602	Biometrics and Biostatistics	1.50	2
19.0501	Food Sciences and Human Nutrition	3.07	14	26.0603	Ecology	2.33	6
19.0503	Dietetics/Human Nutritional Services	3.75	4	26.0607	Marine Biology	2.00	2
19.0701	Individual and Family Development	2.00	4	26.0701	Zoology	2.00	1
19.0704	Family Relations	2.00	1	26.0706	Physiology Animal and Human	3.00	2
19.0705	Geriatric Services	3.00	1	26.9999	General Science	2.50	2
19.0901	Design and Merchandising	2.80	5	27.0000	Mathematics		
19.0902	Fashion Design	3.00	1	27.0101	General Mathematics	3.32	25
19.0903	Textiles and Clothing, Retail	3.50	2	27.0301	Applied Mathematics	3.00	1
19.9999	Home Economics and Related Occupation	2.00	2	27.9999	Mathematics	4.00	4
20.0000	Vocational Home Economics			27.0501	Statistics	4.00	1
20.0102	Child Development, Care, and Guidance	3.00	6	30.0000	Multi\Interdisciplinary Studies		
20.0103	Clothing, Textiles & Fashion Merchand.	2.80	5	30.0101	Biological and Physical Sciences	2.67	6
20.0104	Consumer Education	2.11	9	30.0301	Engineering and Other Disciplines	3.00	1
20.0299	Child Care and Guidance Management Services	4.00	1	30.0401	Humanities and Social Sciences	1.80	10
20.0401	Food Production, Management, and Service	4.00	1	30.0501	Peace and Conflict Studies	1.00	3
20.0406	Food Service	4.00	3	30.0701	Women's Studies	1.25	4
				30.9999	Multi-Interdisciplinary Studies	2.56	9

**Means**

- ≥ 4.50
- 3.51 - 4.49
- 2.51 - 3.50
- 1.51 - 2.50
- ≤ 1.50

**Implications**

- Many more job opportunities than graduates available.
- Slightly more job opportunities than graduates available.
- About as many jobs available as graduates.
- Slightly more graduates than available jobs.
- Many more graduates than available jobs.

**Table 3: (Continued) Demand Ratings for Specific Programs at the Bachelor Level According to CIP Numbers**

CIP	Program Name	Average Respondents		CIP	Program Name	Average Respondents	
31.0000	Parks and Recreation			45.0000	Social Sciences		
31.0101	Parks and Recreation	4.00	1	45.0101	Social Science	1.94	16
31.0201	Outdoor Recreation	3.00	2	45.0201	Anthropology	1.38	13
31.0301	Parks and Recreation Management	2.86	7	45.0401	Criminology	3.50	2
31.9999	Therapeutic Recreation	3.00	1	45.0601	Economics	2.33	3
32.0000	Basic Skills			45.0701	Geography	2.00	5
32.0104	Computational Skills	5.00	2	45.0801	History	1.81	27
38.0000	Philosophy and Religion			45.0901	International Relations	1.67	3
38.0101	Philosophy	1.64	14	45.1101	Sociology	2.00	24
38.0201	Religion	2.17	6	45.1201	Urban Studies	1.50	4
38.9999	Contemporary Ministries	2.67	3	45.9999	Human Services	2.20	5
39.0000	Theology			48.0000	Precision Production		
39.0601	Theological Studies	4.00	1	48.0201	Graphic and Printing Communications	4.00	1
39.9999	Religion and Theology	2.00	1	48.0203	Commercial Art	2.00	1
40.0000	Physical Sciences			49.0000	Transportation and Material Moving		
40.0101	Physical Sciences	2.86	7	49.0104	Aviation Management	3.50	2
40.0501	Chemistry, General	3.67	3	50.0000	Visual and Performing Arts		
40.0502	Analytical Chemistry	3.17	6	50.0202	Ceramics	2.00	1
40.0503	Inorganic Chemistry	3.17	6	50.0204	Fiber\Textiles\Weaving	2.00	1
40.0504	Organic Chemistry	3.17	6	50.0206	Metal\Jewelry	2.00	1
40.0506	Physical Chemistry	3.80	5	50.0299	Wood Crafts	2.00	1
40.0599	Business Oriented Chemistry	3.00	1	50.0301	Dance	2.40	5
40.0601	Geology	2.42	24	50.0401	Art and Design	3.00	3
40.0603	Geophysics and Seismology	3.00	9	50.0402	Graphic Design	3.00	1
40.0703	Earth Science	2.50	12	50.0403	Illustration Design	3.00	1
40.0801	Physics	3.52	27	50.0404	Industrial Design	4.00	1
40.9999	Health Sciences	4.00	1	50.0499	Metalsmithing	2.67	3
41.0000	Science Technologies			50.0501	Dramatic Arts	2.05	21
41.0301	Chemical Technology	4.67	3	50.0602	Cinematography\Film	2.33	3
42.0000	Psychology			50.0605	Photography	2.00	6
42.0101	Psychology	2.44	27	50.0701	Fine Arts	1.84	19
42.0401	Community Psychology	3.00	1	50.0703	Art History and Appreciation	1.20	5
42.0801	Experimental Psychology	4.00	1	50.0705	Drawing	1.75	4
42.0901	Industrial and Organizational Psychology	3.00	1	50.0706	Intermedia	1.00	2
42.1601	Social Psychology	2.50	2	50.0708	Painting	1.50	4
42.9999	Biopsychology	2.00	2	50.0709	Sculpture	1.43	7
43.0000	Protective Services			50.0799	Art	2.00	2
43.0101	Correctional Administration	3.00	4	50.0801	Graphic Arts Technology	2.00	1
43.0102	Corrections	3.00	1	50.0901	Teaching, Music	2.53	17
43.0103	Criminal Justice Administration	2.00	2	50.0902	Music History and Appreciation	1.00	1
43.0104	Criminal Justice Studies	2.67	6	50.0903	Music Performance	2.29	7
43.0107	Law Enforcement	3.33	3	50.0904	Music Theory and Composition	3.00	1
43.0109	Security Services	3.00	2				
43.0199	Criminal Justice/Corrections	3.00	5				
44.0000	Public Affairs						
44.0101	Public Affairs	2.33	3				
44.0201	Community Services	3.00	1				
44.0401	Public Administration	2.29	14				
44.0501	Public Policy Studies	3.00	3				
44.0701	Social Work	3.22	18				

**Means**

- ≥ 4.50
- 3.51 - 4.49
- 2.51 - 3.50
- 1.51 - 2.50
- 1.50

**Implications**

- Many more job opportunities than graduates available.
- Slightly more job opportunities than graduates available.
- About as many jobs available as graduates.
- Slightly more graduates than available jobs.
- Many more graduates than available jobs.

**Table 4: Demand Ratings for Specific Programs at the Masters Level  
According to CIP Numbers**

CIP	Program Name	Average	Respondents	CIP	Program Name	Average	Respondents
3.0000	Renewable Natural Resources			13.0000	Education (continued)		
3.0501	Forestry	3.50	2	13.1303	Business Education	3.20	3
4.0000	Architecture and Environmental Design			13.1305	English Education	2.50	10
4.0301	Urban Planning	2.00	4	13.1306	Foreign Language	3.00	5
4.0501	Interior Design	2.33	3	13.1307	Health Education	2.00	2
5.0000	Area and Ethnic Studies			13.1309	Industrial Arts Education	3.14	7
5.0102	American Studies	1.33	3	13.1311	Mathematics Education	3.67	6
5.0105	Eastern European Studies	1.67	3	13.1312	Music Education	3.00	5
6.0000	Business Management			13.1314	Physical Education	1.67	9
6.0101	Business Management, General	3.33	3	13.1315	Reading Education	3.25	12
6.0201	Accounting	4.00	15	13.1316	Science Education	3.50	8
6.0301	Banking and Finance	3.86	7	13.1317	Social Science Education	2.00	2
6.0401	Business Admin. and Management, General	3.14	19	13.1318	Social Studies Education	2.33	3
6.0501	Business Economics	3.00	3	13.1319	Technical Education	3.67	3
6.0701	Hotel, Rest and Instit. Manag.	4.00	1	14.0000	Engineering		
6.0705	MLM - Transportation Management	4.00	1	14.0701	Chemical Engineering	4.14	7
6.1101	Industrial Relations	3.00	3	14.0801	Civil Engineering	3.43	7
6.1302	Operations Research	3.50	6	14.0901	Computer Engineering	4.20	5
6.1401	Marketing Management	3.43	7	14.1001	Electrical Engineering	3.78	9
6.1501	Organizational Behavior	2.75	4	14.1101	Engineering Mechanics	3.50	2
6.1601	Personnel- Human Relations	4.00	1	14.1501	Geological Engineering	4.00	2
6.1901	Taxation	4.33	3	14.1701	Industrial Engineering	3.33	6
6.2001	Trade and Industrial Supervision & Mgmt	4.00	1	14.1901	Mechanical Engineering	4.11	9
6.9999	Business and Management, Other	3.17	12	14.2001	Metallurgical Engineering	4.17	6
9.0000	Communications			14.2101	Mining Engineering	4.00	2
9.0101	Communication	2.16	10	14.9999	Electronics and Computer Control Systems	4.00	4
11.0000	Computer and Information Sciences			16.0000	Foreign Languages		
11.0101	Computer and Information Sciences	3.62	10	16.0402	Russian	1.67	3
13.0000	Education			16.0501	German	1.33	3
13.0101	Education, General	3.44	13	16.0601	Greek	1.00	3
13.0201	Bilingual-Bicultural Education	3.75	4	16.0901	French	1.75	4
13.0301	Curriculum and Instruction	2.67	6	16.0902	Italian	1.33	3
13.0401	Education Administration	3.13	20	16.0903	Latin	1.00	3
13.0501	Educational Media	3.33	3	16.0905	Spanish	2.25	4
13.0603	Evaluation Research	2.67	3	16.9999	Near Eastern Languages	2.60	5
13.0604	Ed. Testing, Evaluation, and Measurement	4.00	1	17.0000	Allied Health		
13.0801	Educational Psychology	3.14	7	17.0310	Medical Technology	3.67	3
13.0901	Social Foundations	2.67	3	17.0804	Exercise Science	3.00	1
13.1001	Special Education, General	3.45	11	17.0806	Music Therapy	3.00	1
13.1002	Teaching Economically and Ed. Disadvantaged	4.00	1	17.0807	Occupational Therapy	4.33	3
13.1005	Teaching the Emotionally Impaired	5.00	2	17.0821	Speech and Language Pathology	5.00	2
13.1006	Teaching the Mentally Impaired	5.00	2	17.0899	Rehabilitation Services, Other	4.00	2
13.1011	Specific Learning Disabilities	5.00	3	18.0000	Health Services		
13.1101	Guidance and Counseling	2.50	6	18.0103	Audiology and Speech Sciences	4.25	8
13.1102	Elementary Education	3.00	1	18.0203	Clinical Microbiology	3.00	2
13.1201	Adult and Continuing Education	3.00	3	18.1003	Anesthesiology	4.67	3
13.1202	Elementary Education	2.55	11	18.1009	Immunology	4.40	5
13.1203	Junior High Education	2.67	3	18.1018	Pathology	4.00	1
13.1204	Early Childhood Education	2.88	8	18.1099	Medicine, Other	3.00	1
13.1205	Secondary Education	3.00	4	18.1101	Nursing	4.62	31
13.1299	Teacher Ed. General Programs, Other	3.00	2	18.1401	Pharmacy	4.21	14
13.1302	Art Education	2.00	5				

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24

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**Means**

- ≥ 4.50
- 3.51 - 4.49
- 2.51 - 3.50
- 1.51 - 2.50
- ≤ 1.50

**Implications**

- Many more job opportunities than graduates available.
- Slightly more job opportunities than graduates available.
- About as many jobs available as graduates.
- Slightly more graduates than available jobs.
- Many more graduates than available jobs.

**Table 4: (Continued) Demand Ratings for Specific Programs at the Masters Level According to CIP Numbers**

CIP	Program Name	Average Respondents		CIP	Program Name	Average Respondents	
18.0000	Health Services (continued)			40.0000	Physical Sciences (continued)		
18.9999	Health Sciences, Other	3.00	3	40.0506	Physical Chemistry	3.75	4
19.0000	Home Economics			40.0599	Chemistry, Other	3.50	2
19.0101	Home Economics, General	2.25	4	40.0601	Geology	2.25	8
19.0501	Nutrition and Food Sciences	3.67	3	40.0603	Geophysics and Seismology	3.00	2
19.0701	Individual and Family Development, General	2.67	3	40.0703	Earth Science	3.00	1
19.0901	Textiles and Clothing, General	2.33	3	40.0801	Physics, General	3.36	11
20.0000	Vocational Home Economics			42.0000	Psychology		
20.0104	Consumer Education	2.00	3	42.0101	Psychology, General	2.00	7
22.0000	Law			42.0201	Clinical Psychology	3.75	4
22.0101	Law	3.70	17	42.0601	Counseling Psychology	3.00	1
23.0000	Letters			42.0701	Developmental Psychology	3.00	1
23.0101	English, General	2.38	8	42.0901	Industrial Psychology	4.00	1
23.0201	Classics	1.00	3	42.1101	Physiological Psychology	4.00	1
23.0301	Comparative English	1.40	5	42.1601	Social Psychology	4.00	1
23.0501	English - Creative Writing	3.33	3	42.9999	Psychology, Other	3.00	3
23.0601	Linguistics	1.33	3	43.0000	Protective Services		
23.0801	Literature, English	2.00	3	43.0104	Criminal Justice	3.00	5
23.1001	Public Communication	2.00	1	44.0000	Public Affairs		
23.9999	Letters, Other	1.00	1	44.0101	Public Affairs, General	4.00	1
25.0000	Library and Archival Sciences			44.0201	Community Leadership	3.00	2
25.0101	Library Science, General	3.75	4	44.0401	Public Administration	2.25	8
25.0401	Library Science	4.00	2	44.0701	Social Work	3.14	7
25.0501	Museum Practice	3.00	1	45.0000	Social Sciences		
26.0000	Life Sciences			45.0101	Social Sciences, General	1.00	1
26.0101	Biological Sciences, General	2.80	10	45.0201	Anthropology	1.25	4
26.0201	Biochemistry and Biophysics	3.50	4	45.0401	Criminology, Criminal Justice	4.00	1
26.0301	Botany, General	2.50	4	45.0601	Economics	3.00	2
26.0302	Bacteriology	3.50	4	45.0701	Geography	2.00	6
26.0501	Microbiology	3.75	4	45.0801	History	1.20	5
26.0601	Anatomy	3.75	4	45.1001	Political Science and Government	1.14	7
26.0701	Zoology, General	2.67	3	45.1101	Sociology	1.40	10
26.0705	Pharmacology, Human and Animal	4.25	4	50.0000	Visual and Performing Arts		
26.0706	Physiology, Human and Animal	3.67	3	50.0501	Dramatic Arts	2.14	7
27.0000	Mathematics			50.0701	Art	1.20	5
27.0101	Mathematics, General	3.33	9	50.0703	Art History	1.00	3
27.0401	Pure Mathematics	3.33	3	50.0708	Painting	1.33	3
27.0501	Mathematical Statistics	3.33	3	50.0709	Sculpture	1.33	3
30.0000	Multi-Interdisciplinary Studies			50.0799	Art	2.00	2
30.0401	Humanities and Social Sciences	1.00	2	50.0901	Music	1.33	3
31.0000	Parks and Recreation			50.0903	Music (Performing, Composition, Theory)	1.80	5
31.0301	Parks and Recreation Management	2.00	2				
34.0000	Health and Related Activities						
34.0199	Health Related Activities, General	2.50	2				
38.0000	Philosophy and Religion						
38.0101	Philosophy	1.50	4				
40.0000	Physical Sciences						
40.0501	Chemistry, General	4.00	2				
40.0502	Analytical Chemistry	3.75	4				
40.0503	Inorganic Chemistry	3.75	4				
40.0504	Organic Chemistry	3.75	4				

**Means**

≥ 4.50  
3.51 - 4.49  
2.51 - 3.50  
1.51 - 2.50  
1.50

**Implications**

Many more job opportunities than graduates available.  
Slightly more job opportunities than graduates available.  
About as many jobs available as graduates.  
Slightly more graduates than available jobs.  
Many more graduates than available jobs.

**Table 5: Demand Ratings for Specific Programs at the Doctoral/Professional Level According to CIP Numbers**

CIP	Program Name	Average Respondents		CIP	Program Name	Average Respondents	
6.0000	Business Management			25.0000	Library and Archival Sciences		
6.1302	Operations Research	5.00	1	25.0101	Library and Archival Sciences, General	3.50	2
11.0000	Computer and Information Sciences			25.0501	Museum Practice	2.00	1
11.0101	Computer Science, General	5.00	1	26.0000	Life Sciences		
13.0000	Education			26.0101	Biological Sciences, General	3.50	4
13.0301	Curriculum and Instruction	3.00	1	26.0201	Biochemistry and Biophysics	3.50	2
13.0401	Education Administration, General	3.20	5	26.0301	Botany, General	3.00	1
13.0406	College and University Administration	3.00	1	26.0302	Bacteriology	4.50	2
13.0604	Ed. Testing, Evaluation, and Measurement	4.00	1	26.0501	Microbiology	4.50	2
13.0801	School Psychology	4.57	7	26.0601	Anatomy	3.50	2
13.1001	Special Education, General	4.00	2	26.0705	Pharmacology, Human and Animal	5.00	2
13.1101	Student Counseling and Personnel Services	3.00	2	26.0706	Physiology, Human and Animal	4.00	1
13.1299	Teacher Education, General Programs, Other	3.00	1	27.0000	Mathematics		
13.1309	Industrial Arts Education	4.00	1	27.0101	Mathematics, General	3.67	3
13.1312	Music Education	4.00	1	38.0000	Philosophy and Religion		
13.1314	Physical Education	1.00	1	38.0101	Philosophy	2.00	2
13.1316	Science Education	4.00	1	40.0000	Physical Sciences		
13.1318	Social Studies Education	1.00	1	40.0501	Chemistry, General	3.80	5
13.1319	Technical Education	1.00	2	40.0502	Analytical Chemistry	4.00	2
13.9999	Teacher Education, Other	1.50	2	40.0503	Inorganic Chemistry	4.00	2
14.0000	Engineering			40.0504	Organic Chemistry	4.00	2
14.0701	Chemical Engineering	4.00	2	40.0506	Physical Chemistry	4.00	2
14.0801	Civil Engineering	3.50	2	40.0601	Geology	3.50	2
14.0901	Computer Engineering	4.50	2	40.0801	Physics, General	3.50	2
14.1001	Electrical Engineering	4.50	2	42.0000	Psychology		
14.1701	Industrial Engineering	4.50	2	42.0101	Psychology, General	3.00	2
14.1901	Mechanical Engineering	4.50	4	42.0201	Clinical Psychology	3.50	2
14.2001	Metallurgical Engineering	4.50	4	42.0701	Developmental Psychology	3.00	1
16.0000	Foreign Languages			42.0901	Industrial Psychology	3.00	2
16.9999	Modern Language	2.00	2	42.1101	Physiological Psychology	3.00	2
18.0000	Health Services			42.1601	Social Psychology	3.00	2
18.1009	Immunology	5.00	2	42.9999	Cognitive Psychology	2.50	2
18.1018	Pathology	5.00	2	44.0000	Public Affairs		
18.1099	Medicine, Other	4.50	2	44.0701	Social Work, General	3.50	6
18.1101	Nursing, General	5.00	2	45.0000	Social Sciences		
18.1105	Nursing Administration	4.50	2	45.0201	Anthropology	2.00	2
18.1201	Optometry	5.00	1	45.0601	Economics	3.00	2
18.1401	Pharmacy	5.00	4	45.0801	History	2.00	2
22.0000	Law			45.1001	Political Science and Government	2.00	2
22.0101	Law, First Professional	4.50	2	45.1101	Sociology	2.00	2
23.0000	Letters			50.0000	Visual and Performing Arts		
23.0101	English, General	2.00	2	50.0501	Dramatic Arts	2.50	2
23.0801	Literature, English	2.00	2				
23.9999	Literary Criticism	2.00	2				

**Means**

- ≥ 4.50
- 3.51 - 4.49
- 2.51 - 3.50
- 1.51 - 2.50
- ≤ 1.50

**Implications**

- Many more job opportunities than graduates available.
- Slightly more job opportunities than graduates available
- About as many jobs available as graduates.
- Slightly more graduates than available jobs.
- Many more graduates than available jobs.