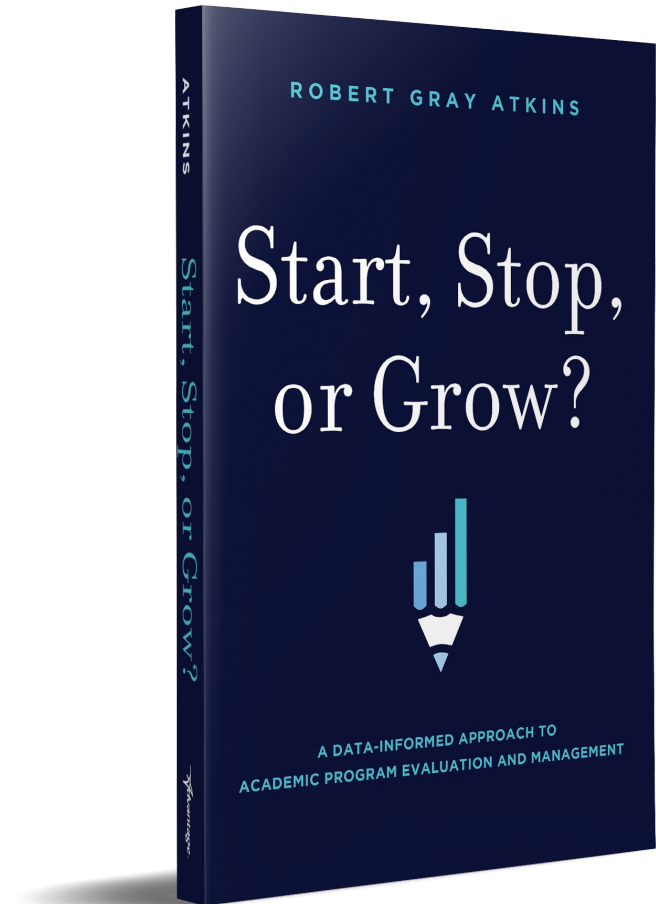


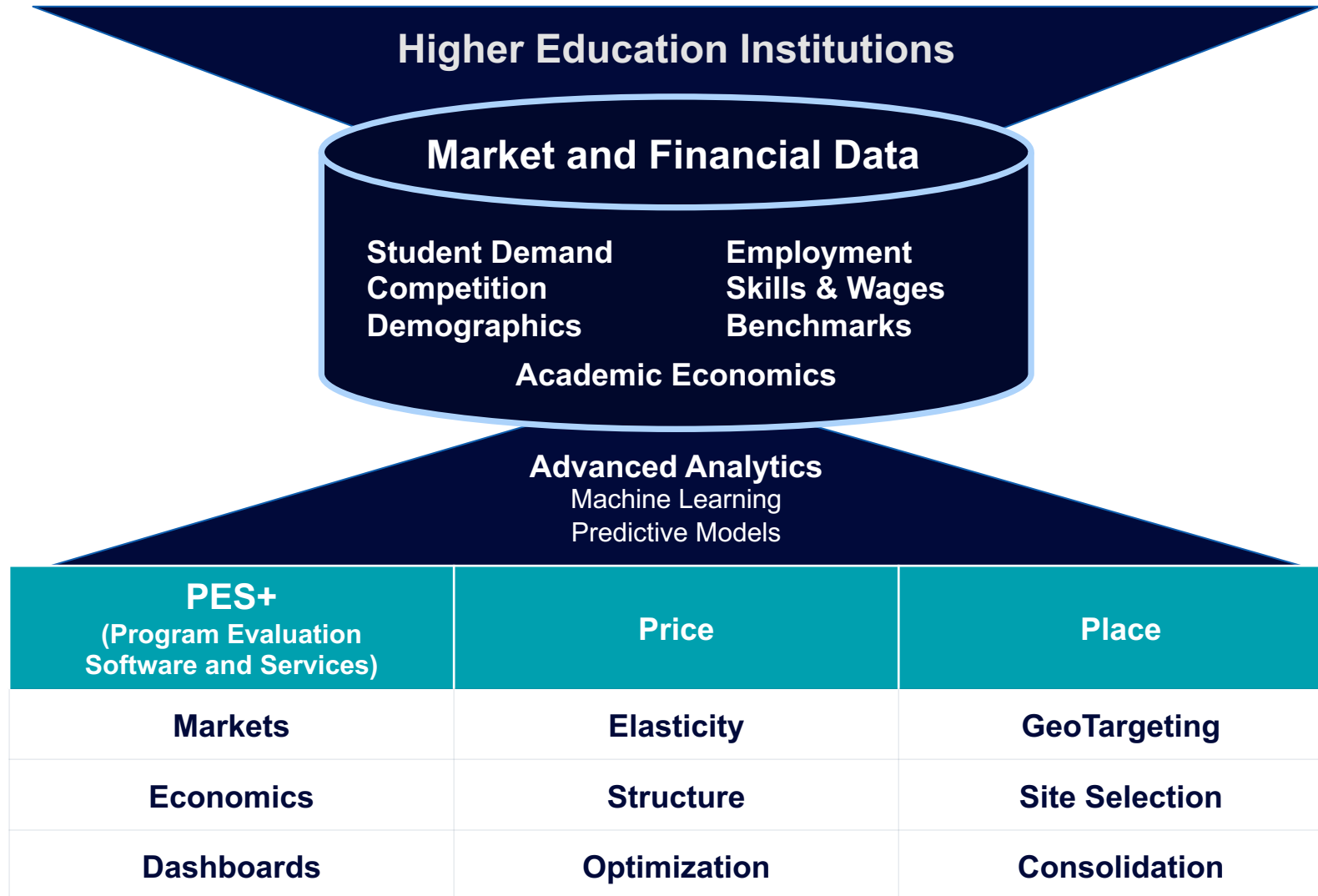


GRAY
ASSOCIATES

Demand for Higher Education Programs

Results through May 2022





Agenda

Google Search

International Student Demand

Enrollment

Employment Trends

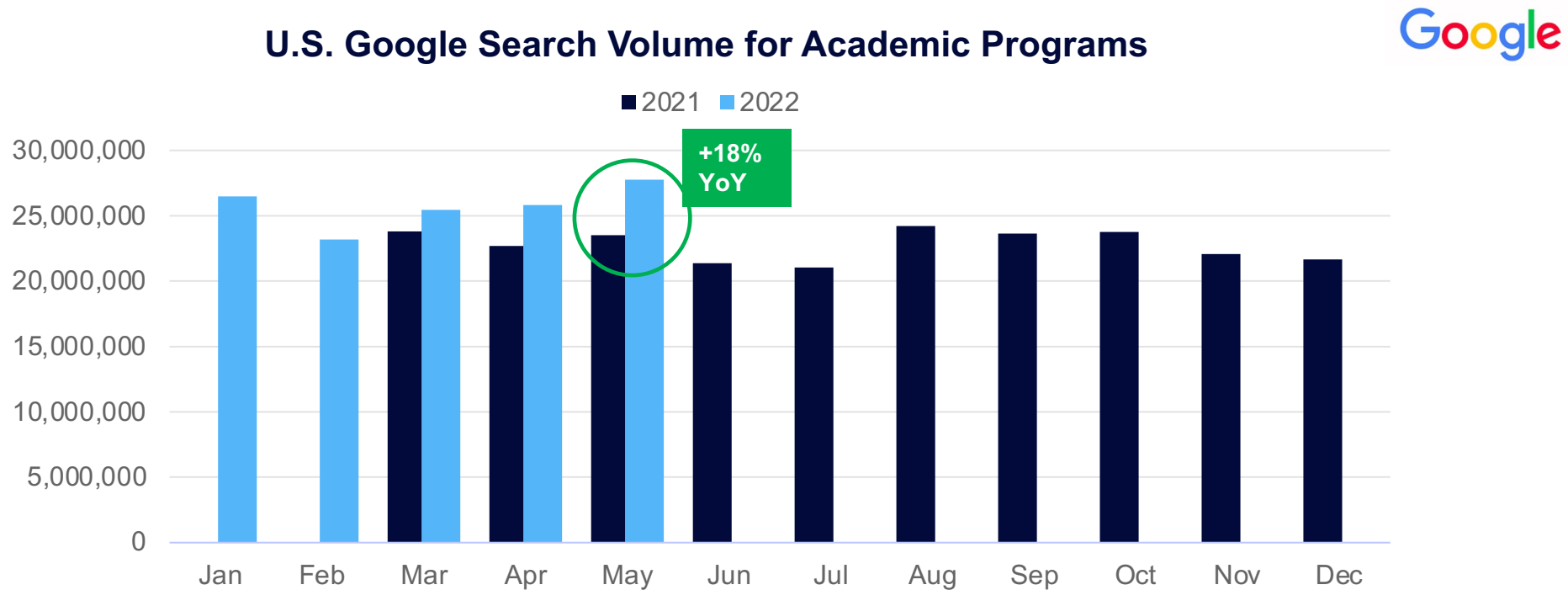
Non-Degree Courses

Program of the Month

Summary

Google Search Trends: Programs

Gray tracks searches for over 900 programs, which comprise over 90% of all US completions



Source: Gray's Keyword Search Dashboard

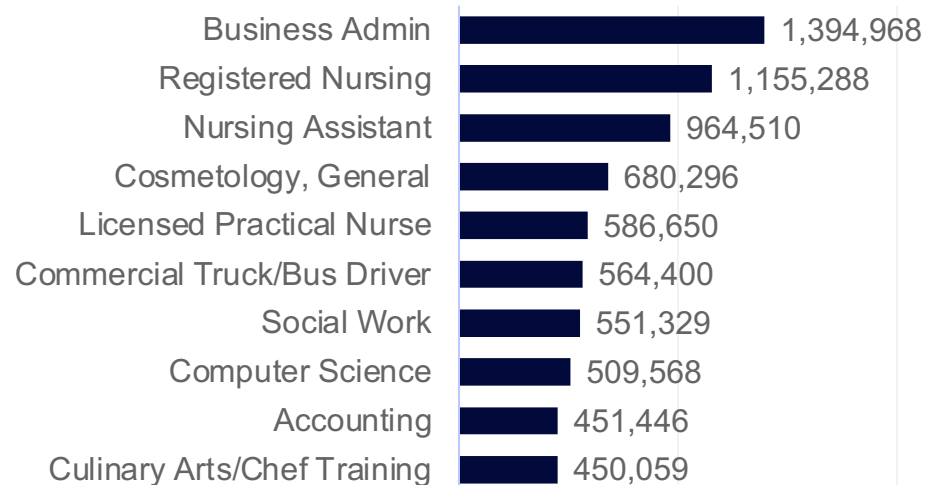
Google: Top Programs, Nationwide

In May, searches for Data Analytics programs grew 157%.



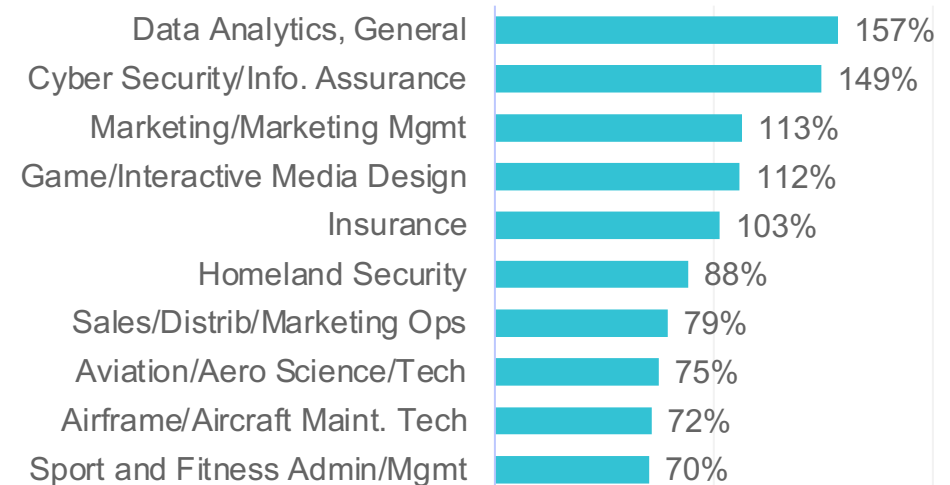
Top U.S. Program Keyword Searches

May 2022



Top Programs by YoY Growth*

May 2022

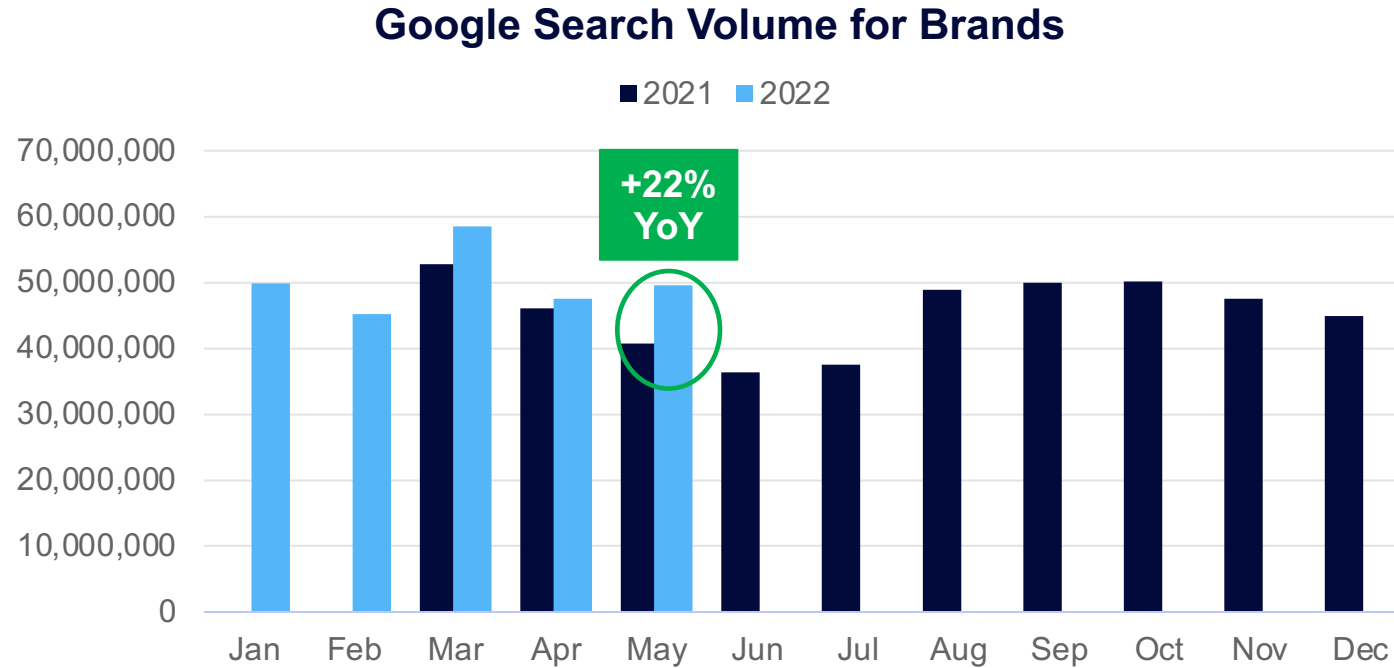


Google search volume for standardized sets of academic keywords for 818 programs.
Source: Gray's Keyword Search Dashboard

*Minimum 10,000 searches 2021

Google Brand Search

Searches for college brands grew 22% year-over-year in May.



Source: Gray's Keyword Search Dashboard - Brands

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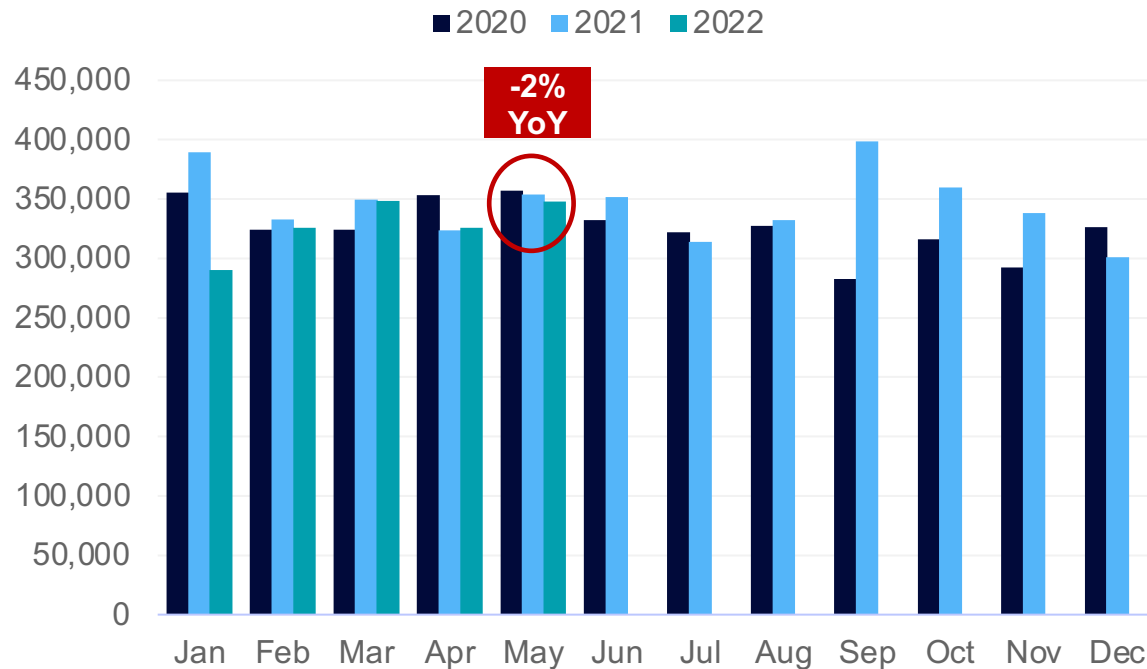
Program of the Month

Summary

International Student Demand

International student interest in U.S. programs fell two percent YoY in May.

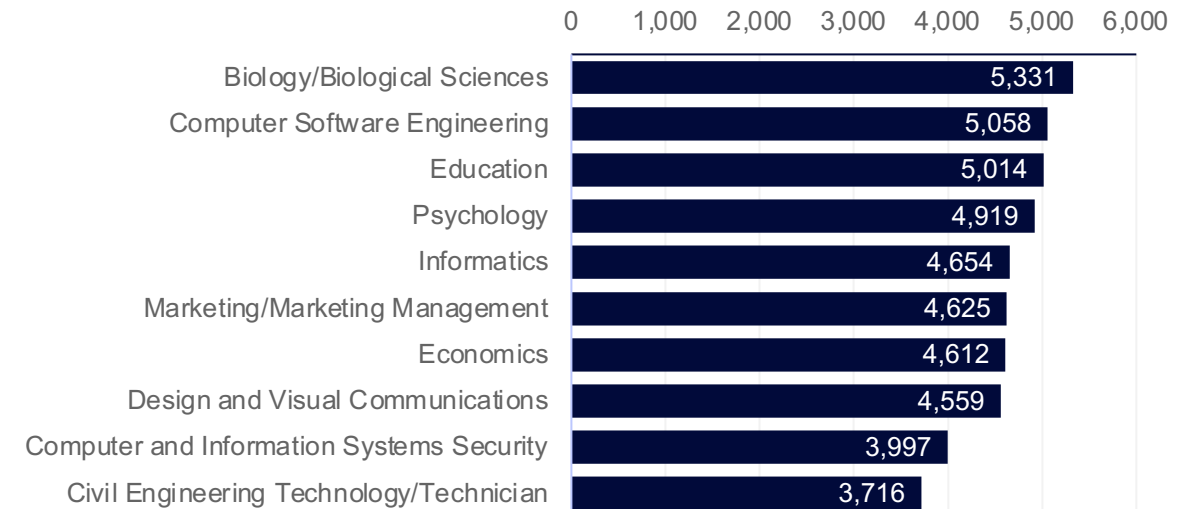
International Page Views



After the top ten, the most-viewed programs were Biology and Computer Software Engineering.

Top 10 Programs: May, 2022

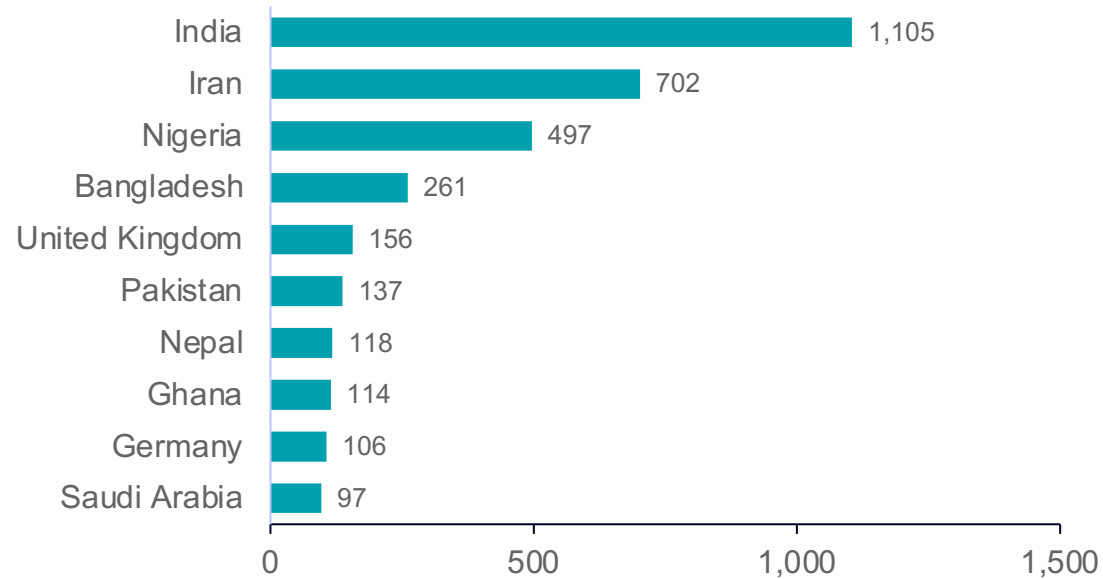
International Page Views



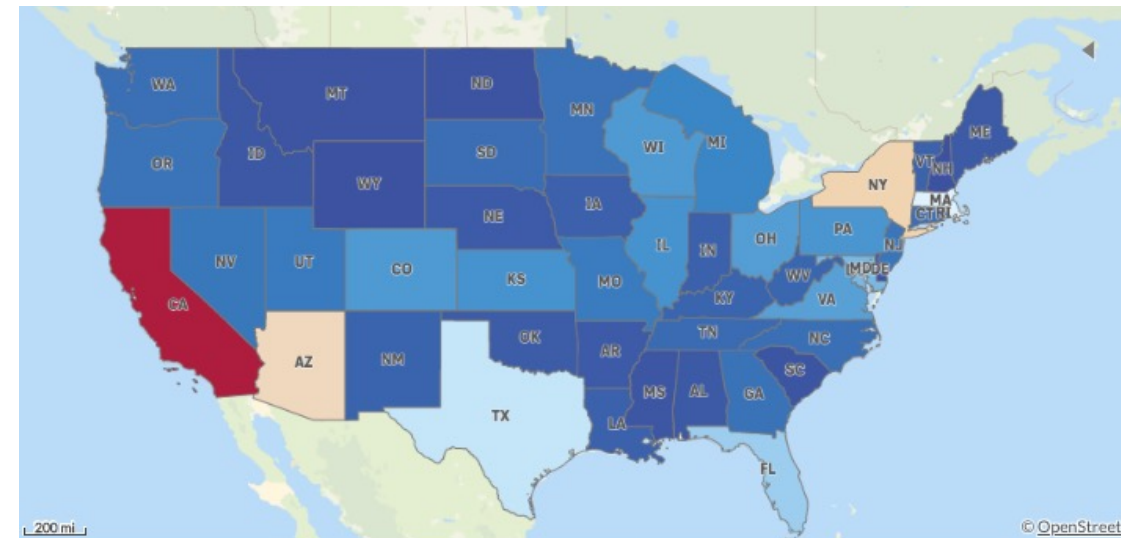
International Page Views: Biology

India led in page views for Biology.

International Page Views by Originating Country
Biology, May 2022



California was the most popular destination, followed by New York and Arizona.



Agenda

Google Search

International Student Demand

Enrollment

Employment Trends

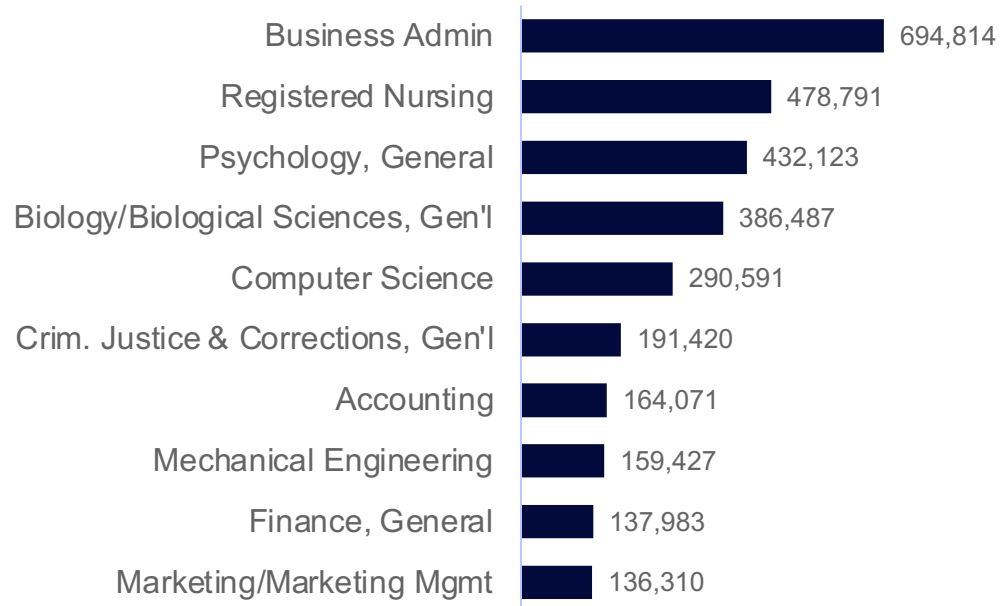
Non-Degree Courses

Program of the Month

Summary

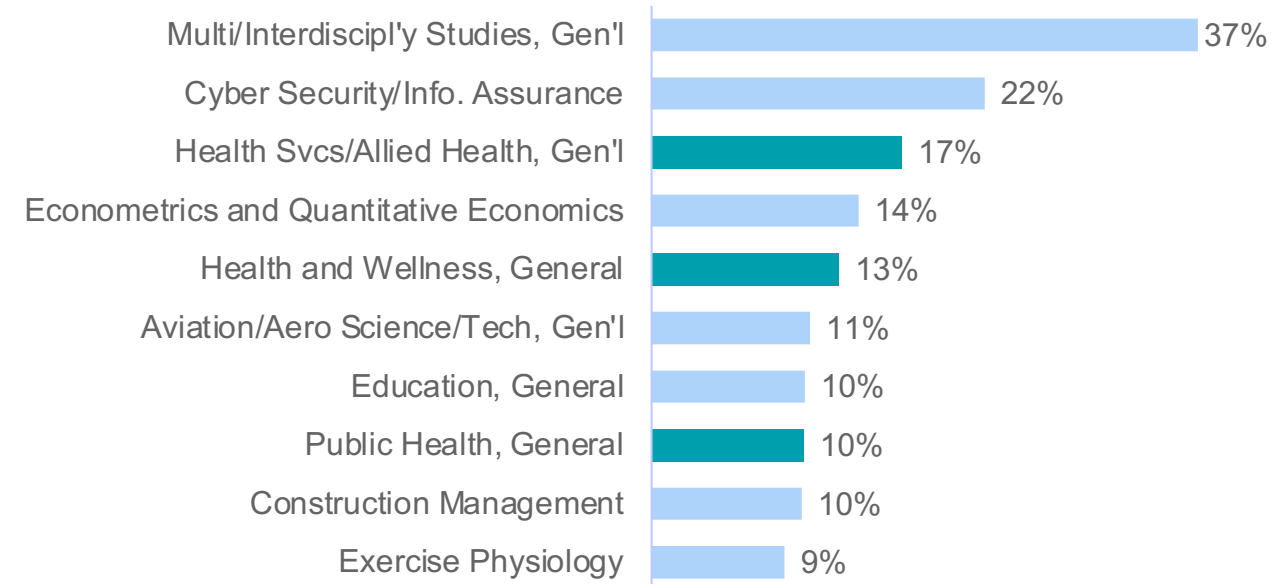
In Fall 2021, Business was the most-enrolled Bachelor's program.

Fall 2021 Top Enrollment Bachelor's Programs



Three health services programs grew the fastest year-over-year.**

Fall 2021 Fastest-Growing Enrollment Bachelor's Programs

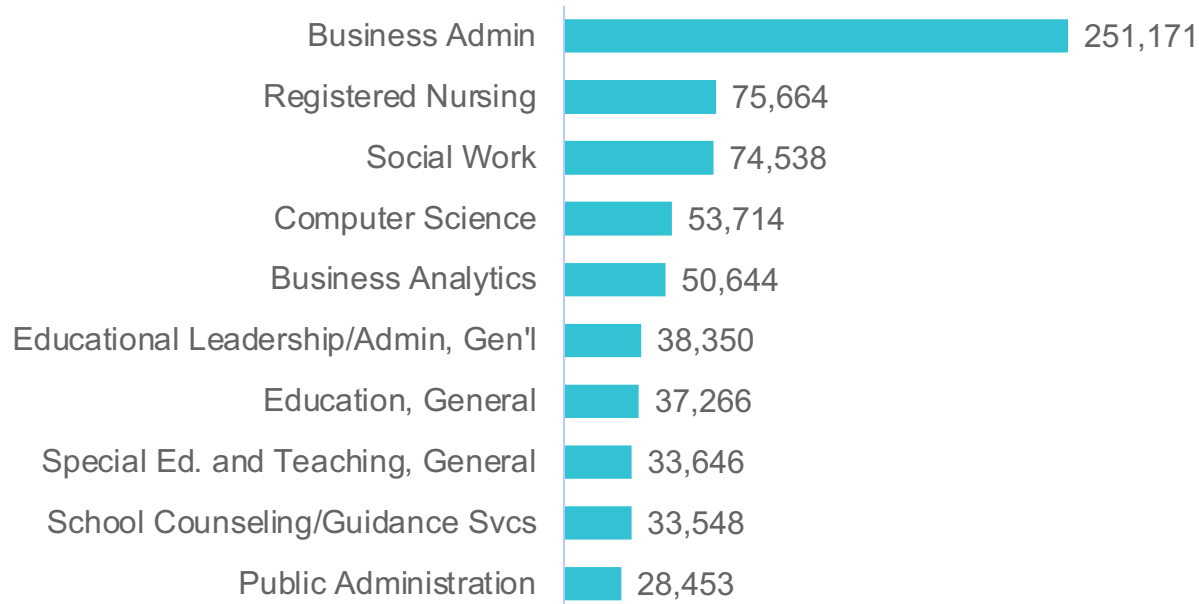


*Excluded General Studies and Liberal Arts.
Source: National Student Clearinghouse, Gray Analysis

**Minimum 10,000 enrollees Fall 2020

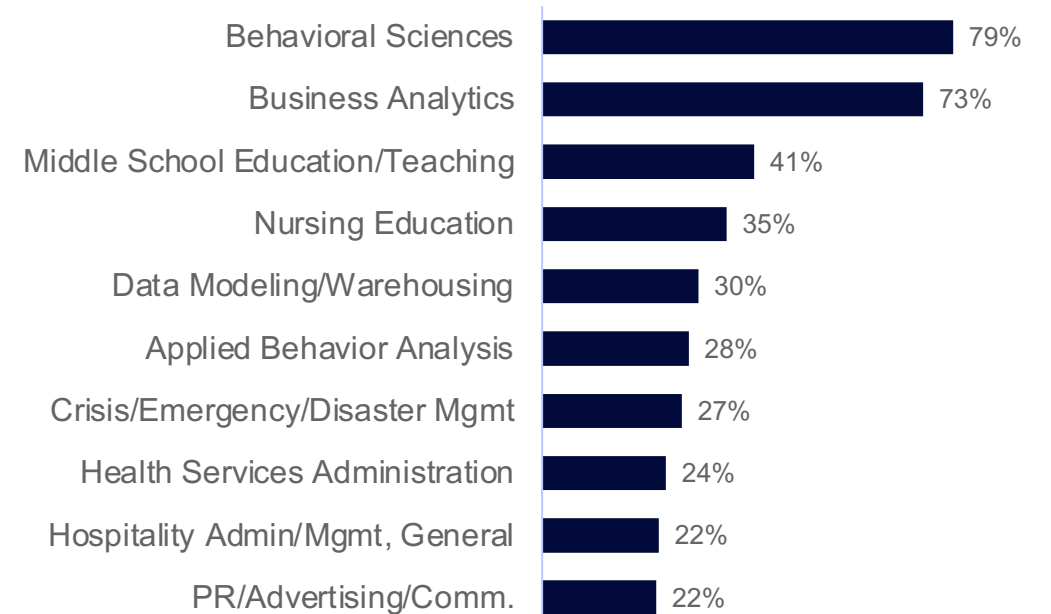
In Fall 2021, Business was the most-enrolled Master's program.

Fall 2021 Top Enrollment Master's Programs



Behavioral Sciences was the fastest-growing Master's program year-over-year.*

Fall 2021 Fastest-Growing Enrollment Master's Programs



Source: National Student Clearinghouse, Gray Analysis

*Minimum program enrollment 1,000 in 2020

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Google Search

International Student Demand

Enrollment

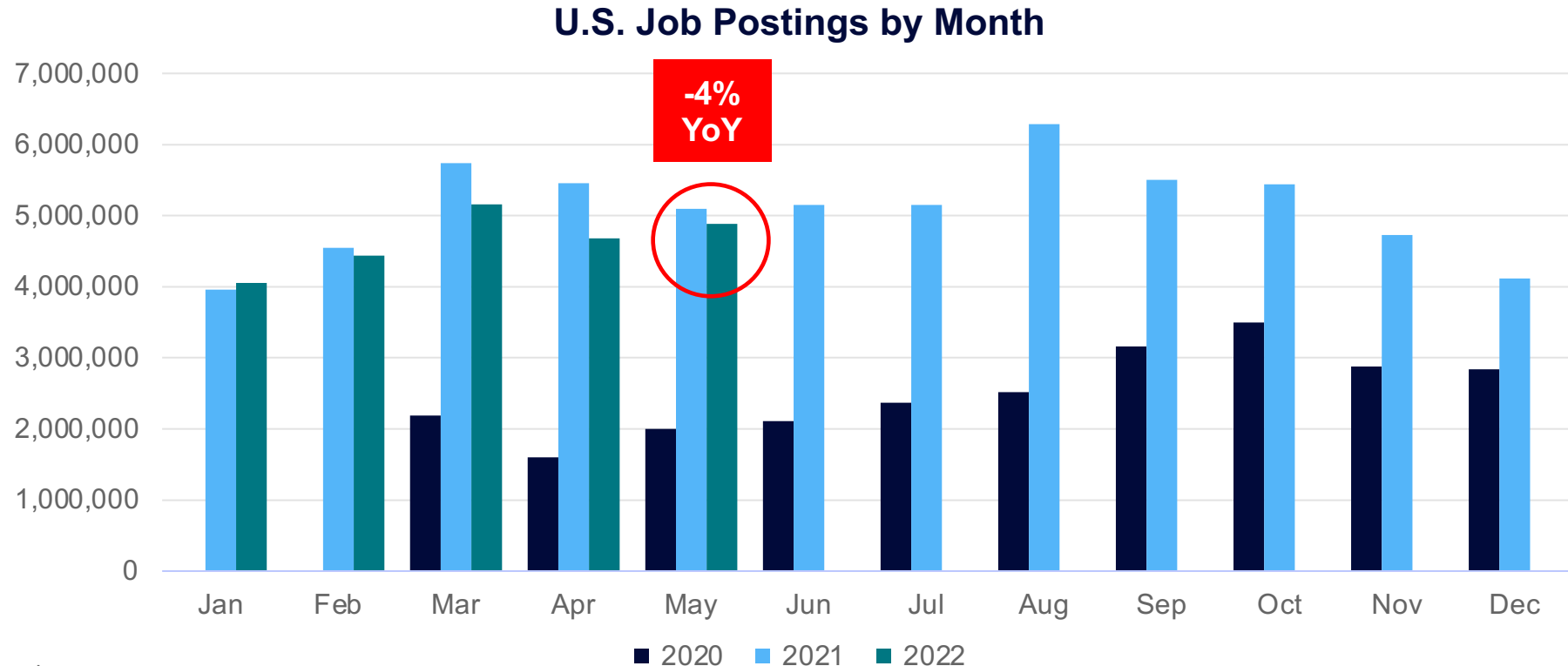
Employment Trends

Non-Degree Courses

Program of the Month

Summary

In May 2022, job postings volume dropped 4% year-over-year.

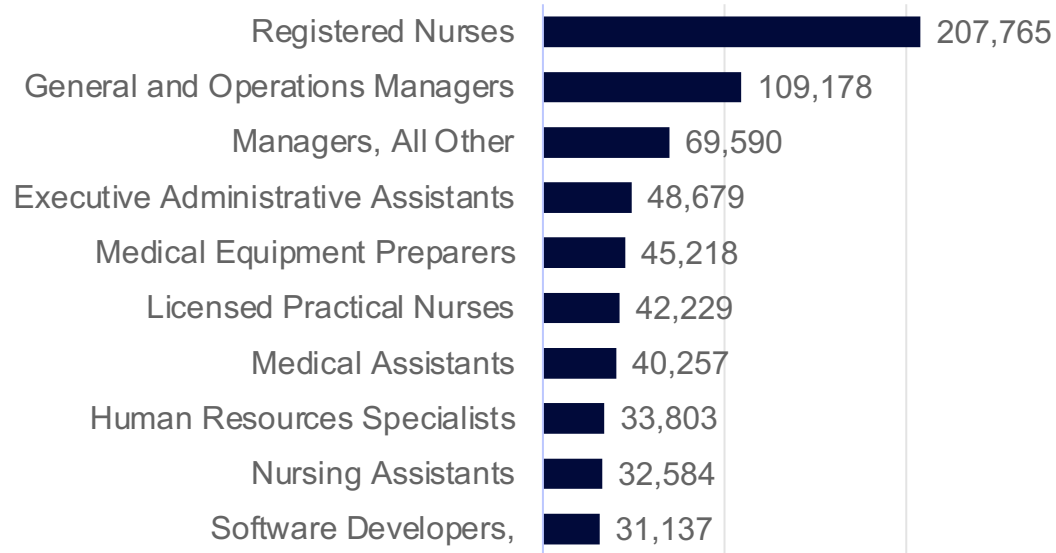


Source: Gray's Job Postings Dashboard

U.S. Job Postings Trends, May 2022

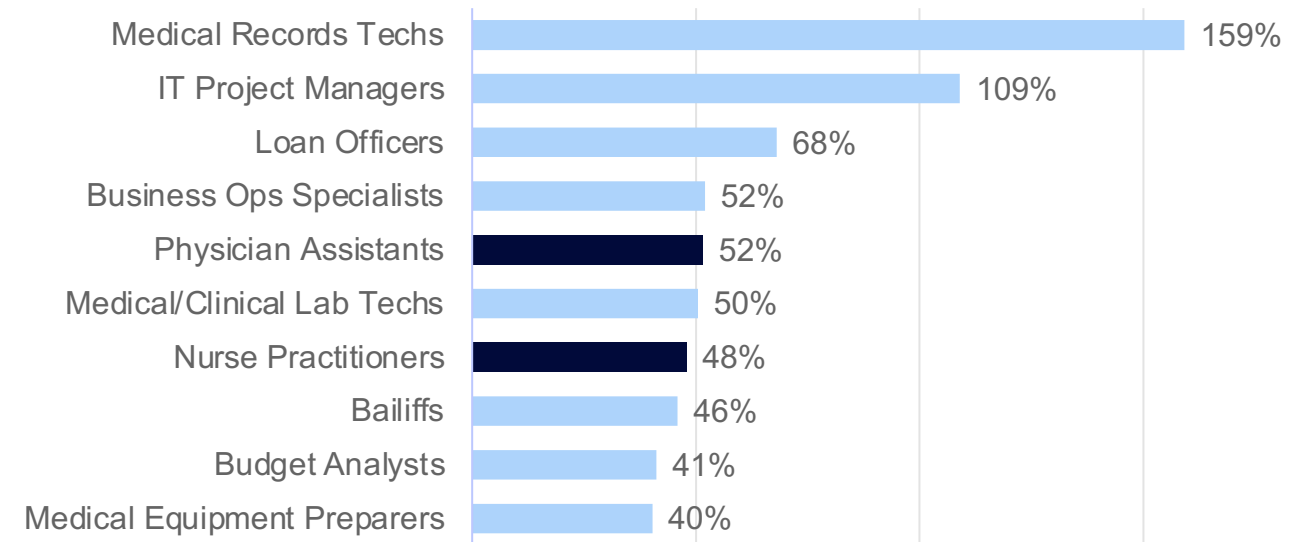
Registered Nurses had the highest volume of postings.

May 2022 Top Job Postings
By Standard Occupational Code



Job postings for Medical Records Technicians increased 159%.**

May 2022 Fastest-Growing Job Postings
By Standard Occupational Code



*Excludes postings that don't require any post-secondary education.

Source: Gray's Job Postings Dashboard

**Minimum 2,000 jobs prior year.

Agenda

Google Search

International Student Demand

Enrollment

Employment Trends

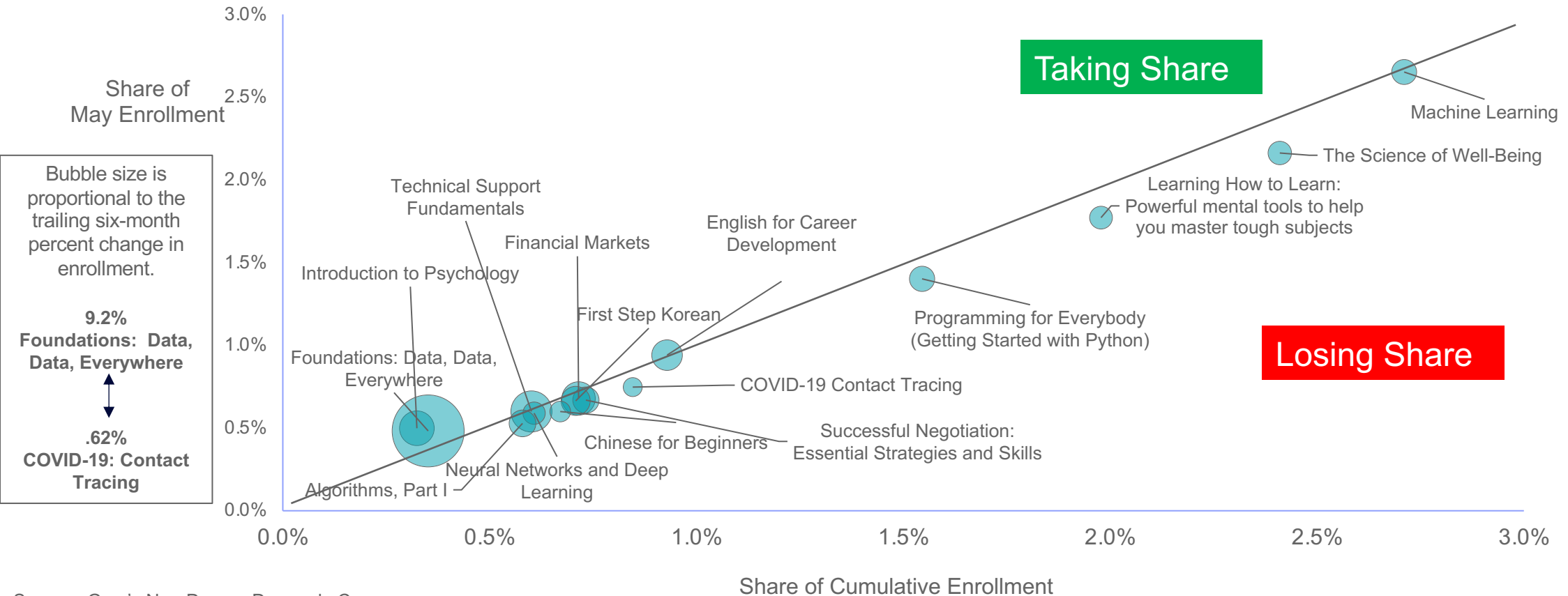
Non-Degree Courses

Program of the Month

Summary

Coursera: Top 15 Courses

May 2022 Share vs. Cumulative Enrollment

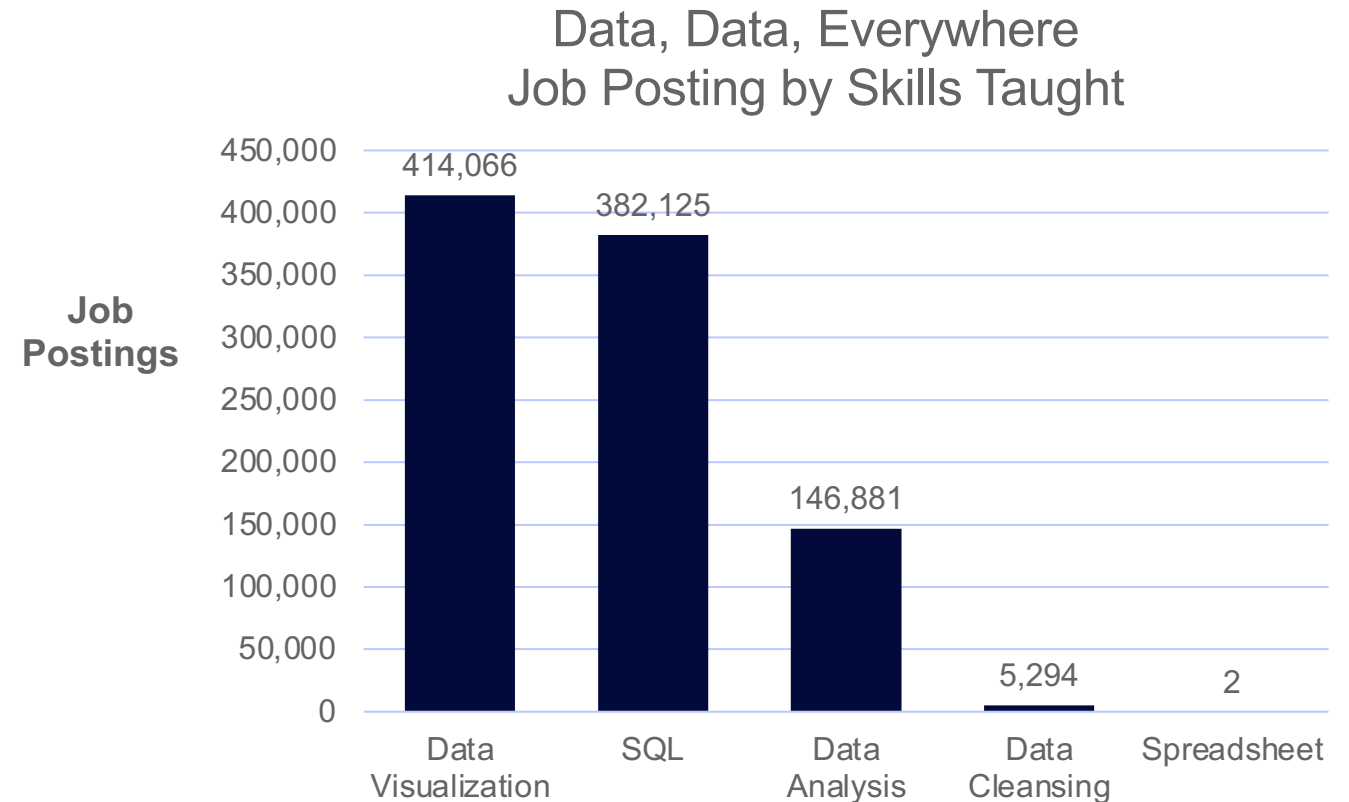


Source: Gray's Non-Degree Demand: Coursera

Skills in Foundations: Data, Data, Everywhere appear frequently in job postings.

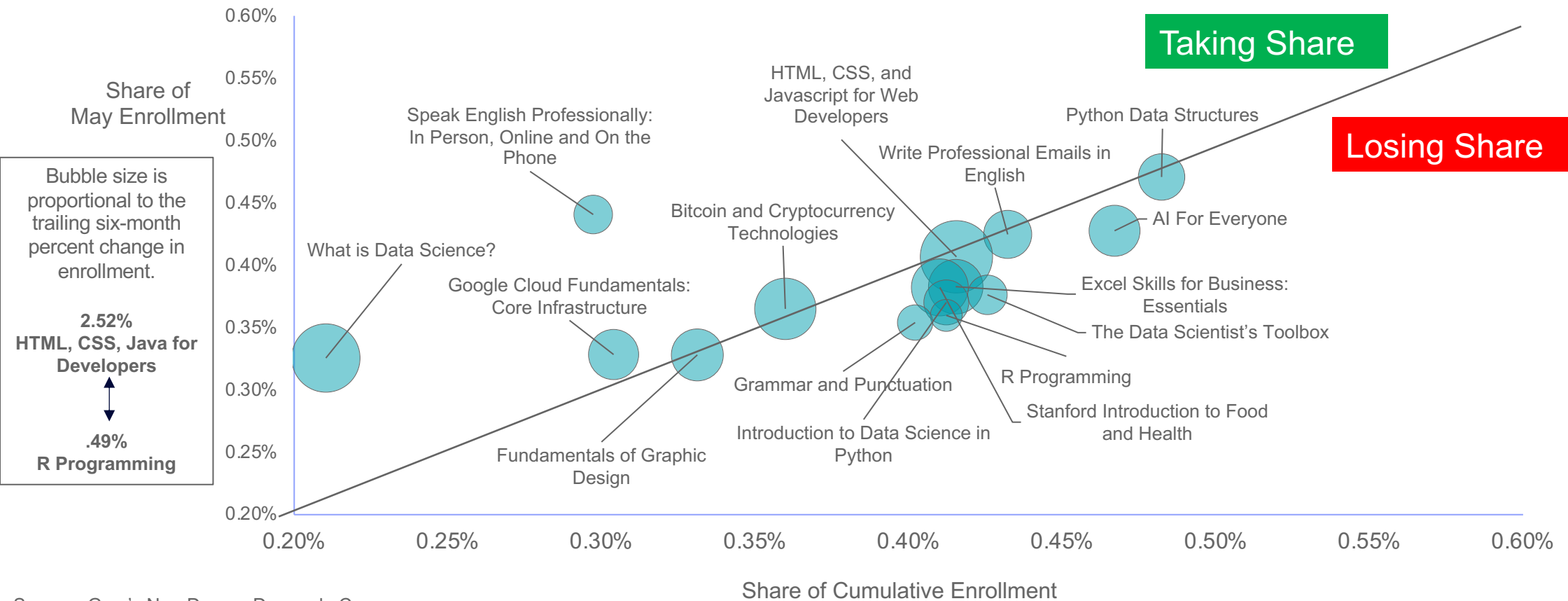
Data, Data Everywhere is the fastest-growing course on Coursera.

- It teaches five skills:
 - Data Analysis
 - Data Cleansing
 - Data Visualization
 - Spreadsheet
 - SQL
- SQL is by far the most requested skill.



Coursera: Top 16-30 Courses

May 2022 Share vs. Cumulative Enrollment



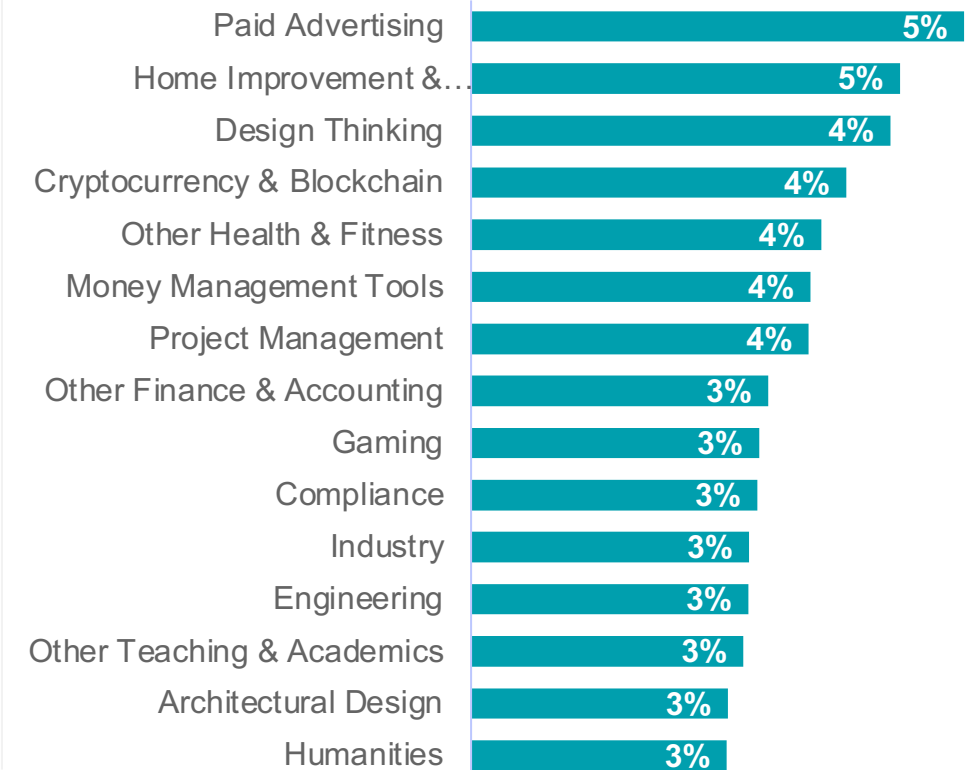
Source: Gray's Non-Degree Demand: Coursera

Udemy: Top Course Categories Excluding Tech*

Top 15 Categories by Cumulative Enrollment



Top 15 Fastest-Growing Categories Trailing Six Months



*These categories are in the top 30 overall.
Source: Gray's Non-Degree Demand: Udemy

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Google Search

International Student Demand

Enrollment

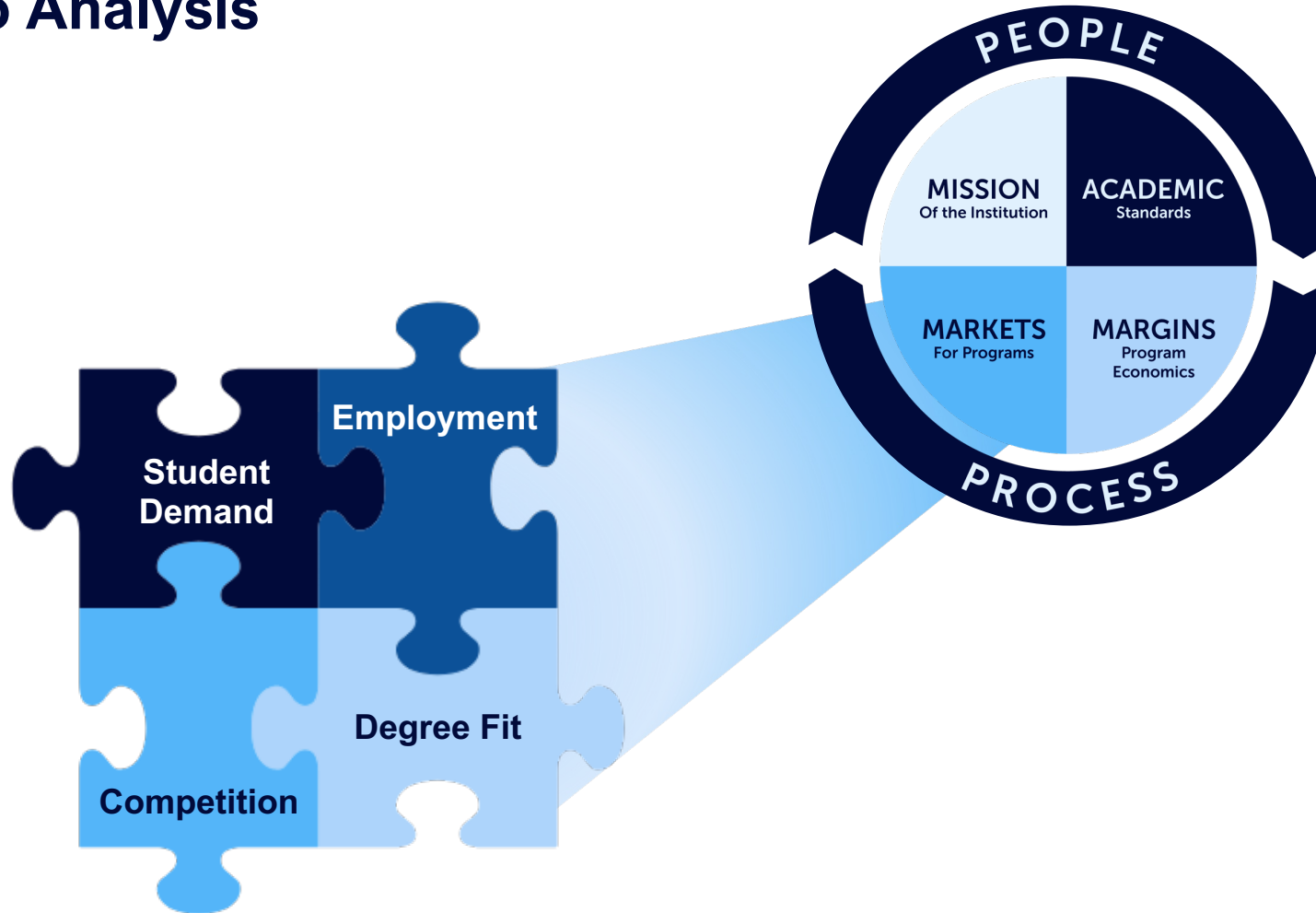
Employment Trends

Non-Degree Courses

Program of the Month

Summary

Program Portfolio Analysis



Program Markets: Program Rank

We score on Student Demand, Employment, Competitive Intensity, and Degree Fit.

- Let's focus on the National market for Bachelor's of Mechanical Engineering.

U.S. Program Ranking Bachelor's Award Level

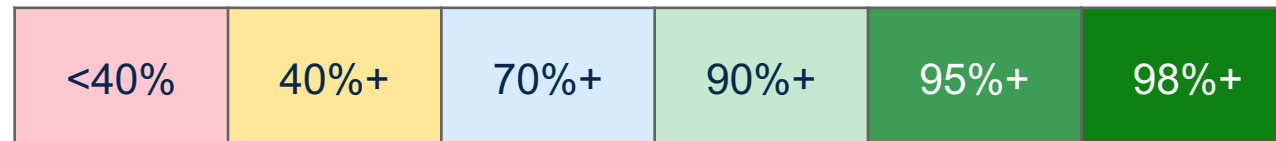
(Double-click Field headers to change sorting.)

CIP	Total Percentile	Student Demand Percentile	Competitive Intensity Percentile	Employment Percentile	Degree Fit Percentile
51.3801 Registered Nursing	100	99	97	97	50
11.0701 Computer Science	99	100	37	92	50
14.1901 Mechanical Engineering	99	99	93	99	50
26.0101 Biology/Biological Sciences, Gen'l	99	99	90	88	50
52.0201 Business Admin. and Mgmt, General	99	99	85	92	50
52.0801 Finance, General	99	99	50	99	50
52.0301 Accounting	99	99	18	98	50
52.0203 Logistics, Materials, and Supply Chain Mgmt	99	99	18	95	50
14.0501 Bioengineering and Biomedical Engineering	99	98	95	94	50
14.0801 Civil Engineering, General	99	98	90	99	50
14.1001 Electrical/Electronics Engin'g	99	98	29	98	50
01.0901 Animal Sciences, General	99	97	99	82	50
14.0201 Aero/Astro/Space Engineering	99	97	98	99	50
45.0603 Econometrics and Quantitative Economics	99	97	97	95	50
14.3501 Industrial Engineering	99	97	95	97	50
14.0701 Chemical Engineering	99	95	98	96	50
11.0103 Information Technology	98	99	10	92	50
52.1401 Marketing/Marketing Mgmt, General	98	99	1	84	50

Program Scorecard: Percentiles

All data are color-coded by their percentile rank in the local market compared to over 1,400 IPEDS programs (CIP codes).

Percentile Color-Code:



Program Scorecard: Student Demand

Mechanical Engineering scores in the 99th percentile for Student Demand.

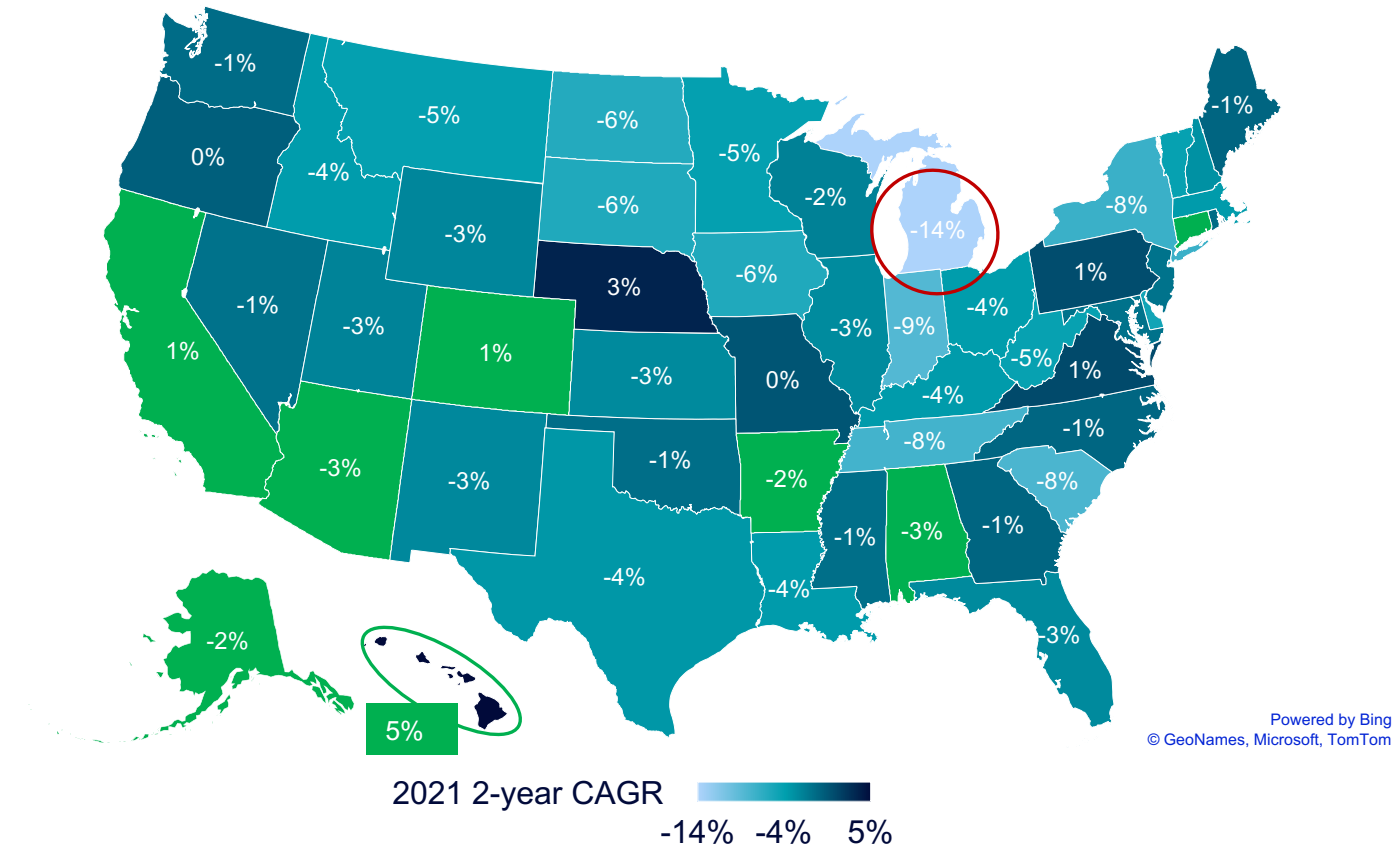
- Enrollment and completions are very strong for this program.
- Program completions are almost entirely on-ground.
- Google search volume is modest.
 - However, year-over-year change in both units and percentage is high.

Student Demand				
Score: 25 Percentile: 99				
Catego...	Pctl	Criterion	Value	Score
Size	99	Enrollment Volume (3 Terms)	14,994	2
	0	Int'l Page Views (12 Months)	0	NS
	66	Google Search Volume (3 Months)*	97,590	4
	99	On-ground Completions at In-Market Institutions	37,750	8
	92	Online Completions by In-Market Students	201	2
	99	Sum of On-ground and Online Completions	37,951	4
Growth	97	Enrollment Volume YoY Change (Units)	309	NS
	85	Google Search YoY Change (Units)*	6,330	1
	98	Completion Volume YoY Change (Units)	608	3
	56	Enrollment Volume YoY Change (%)	2%	NS
	83	Google Search YoY Change (%)*	7%	1
	55	Completion Volume YoY Change (%)	2%	0

Fall 2021 Enrollment in U.S. Mechanical Engineering programs.

- Fall 2021 average enrollment by state was 2,190.
- Enrollment rose 5% in Hawaii.
- Enrollment in Michigan dropped 14%.

Fall 2021 Mechanical Engineering Program Enrollment Change
Year-over-Year Annual Growth



Source: National Student Clearinghouse, Gray Analysis, Student Location

Program Scorecard: Employment

Mechanical Engineering ranks in the 99th percentile for Employment.

- Job postings for Mechanical Engineering graduates are high.
 - Total employment declined 4.4% year-over-year.
- The market is somewhat saturated.
- For Bachelor's degree holders in Mechanical Engineering, wages are in the 95th percentile for those under 30.
 - However, the unemployment rates is 3%.

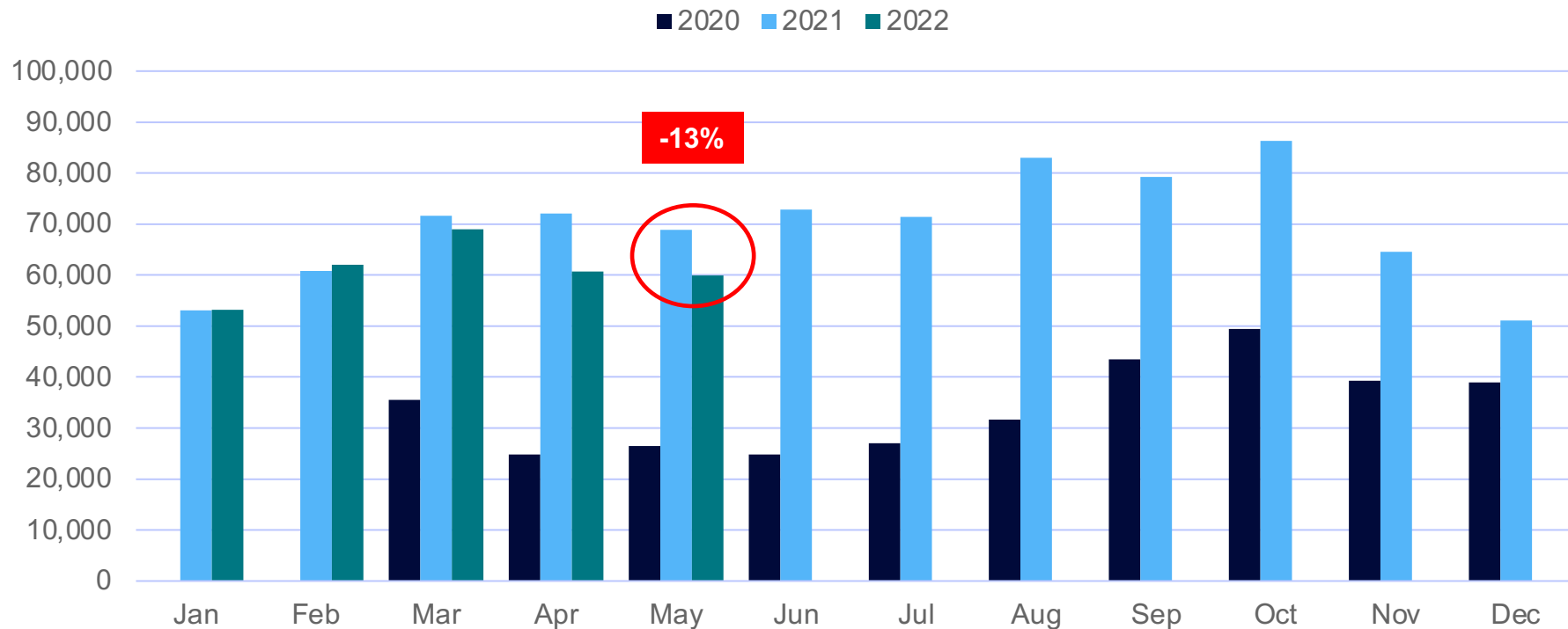
Employment*

Score: 15 Percentile: 99

Category	Pctl	Criterion	Value	Score
Size: Direct Prep	97	Job Postings Total (12 Months)*	169,470	2
	93	BLS Current Employment*	339,084	1
	90	BLS Annual Job Openings*	20,642	NS
Size: Bachelors with ACS	99	Job Postings Total (12 Months)*	207,362	NS
	98	BLS Current Employment*	641,473	NS
Growth (Direct Prep)	42	BLS 1-Year Historical Growth*	-4.4%	NS
	75	BLS 3-Year Historic Growth (CAGR)*	2.7%	0
	32	BLS 10-Year Future Growth (CAGR)*	0.3%	-1
Saturation (Direct Prep)	69	Job Postings per Graduate*	3.6	0
	47	BLS Job Openings per Graduate*	0.4	NS
Wages (Direct Prep)	91	BLS 10th-Percentile Wages*	60,270	NS
	86	BLS Mean Wages*	\$92,920	NS
American Community Survey Bachelor's Degree Outcomes	95	Wages (Age < 30)	\$66,235	9
	93	Wages (Age 30-60)	\$137,551	6
	54	% with Any Graduate Degree	42%	NS
	82	% with Masters	34%	NS
	52	% with Doct/Prof Degree	7%	NS
	65	% Unemp. (Age <30)**	3%	-1
	73	% Unemp. (Age 30-60)**	2%	-1
	92	% in Direct Prep Jobs	37%	NS

U.S. job postings for Mechanical Engineering graduates dropped 13% year-over-year.

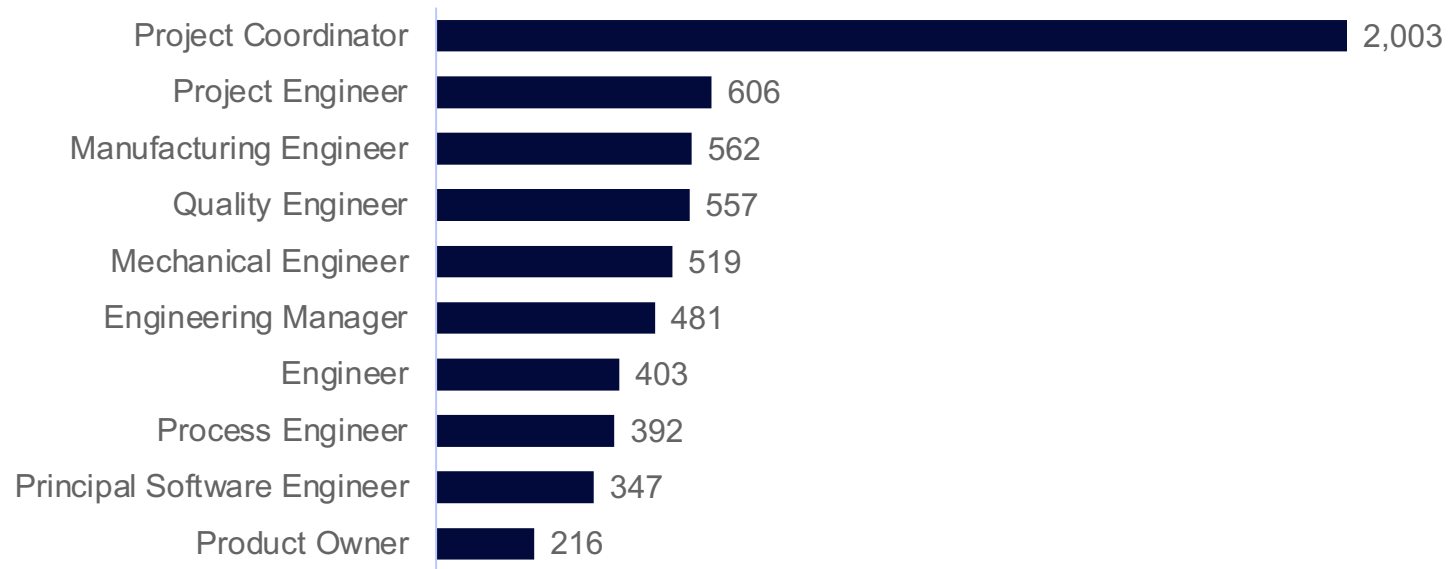
Job Postings Volume, Mechanical Engineering



Job Postings: Mechanical Engineering

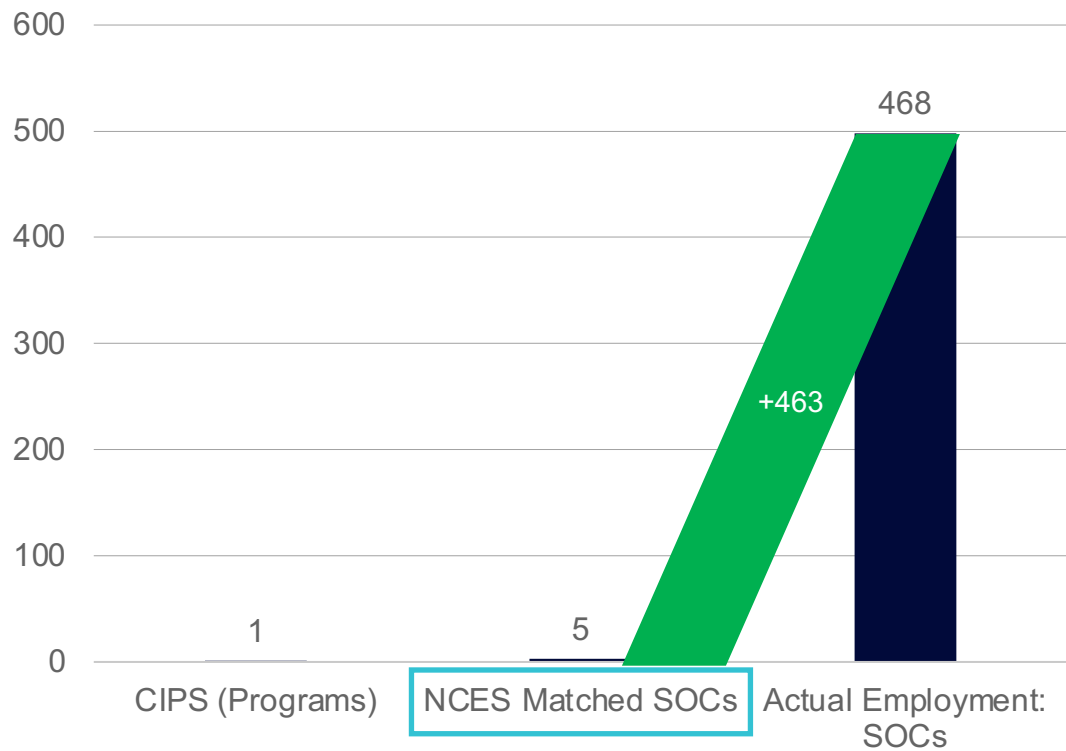
In May, Project Coordinators were in high demand.

Top Job Postings, Mechanical Engineering
May 2022

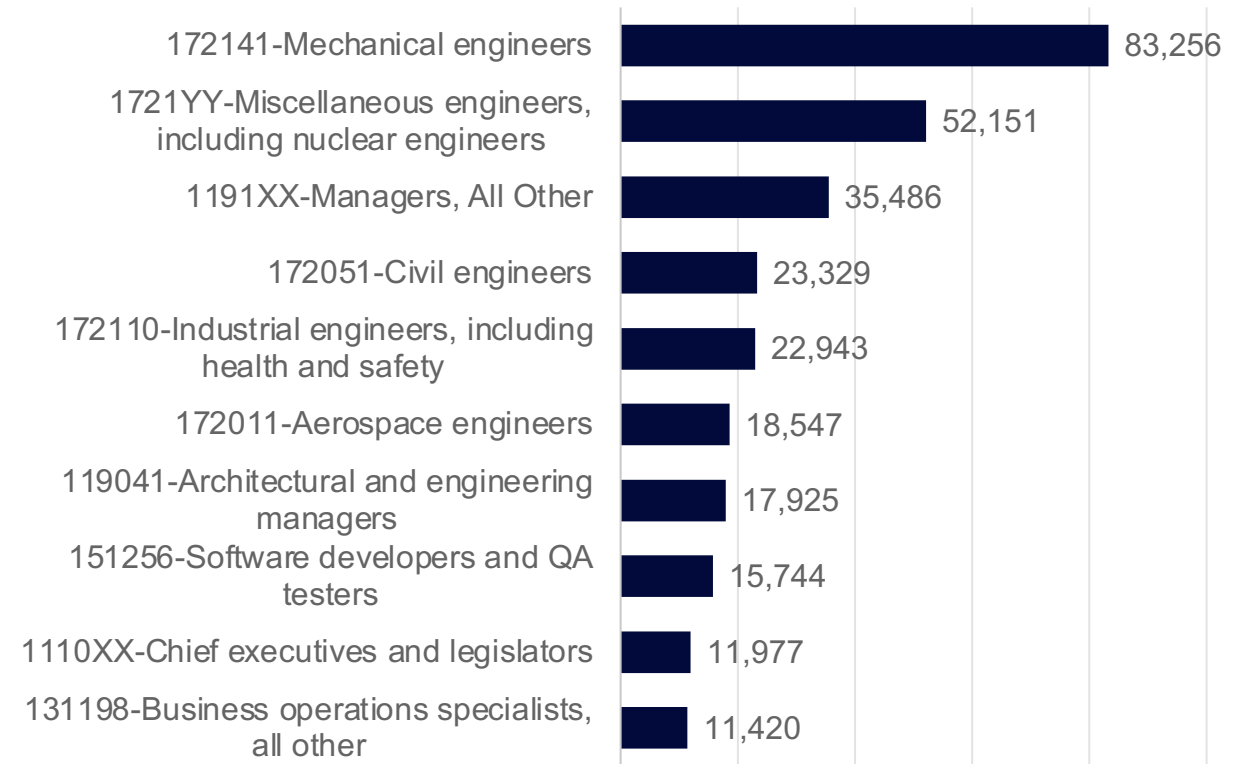


In the U.S., Mechanical Engineering majors go into 468 SOCS and earn an average of \$137,551 from ages 30 – 60.

Count of Programs and Occupations
CIP 14.1901, Mechanical Engineering



Top Occupations, Mechanical Engineering Majors, Ages 30-60



Source: U.S. Census, American Community Survey, 2015 - 2019

Program Scorecard: Competitive Intensity

Mechanical Engineering is in the 84th percentile for Competitive Intensity.

- Students complete this program at 356 institutions.
- Median program sizes are very strong, but the median is down year-over-year.
- Marketing costs are high.
- Nationally, only four institutions offer the program online.

Competitive Intensity Score: -1 Percentile: 84

Category	Pctl	Criterion	Value	Score
Volume of In-Market Competition	97	Campuses with Graduates**	356	-6
	98	Campuses with Grads YoY Change (Units)**	10	-3
	88	Institutions with Online In-Market Students**	4	NS
In-Market Program Sizes	99	Average Program Completions	106	6
	99	Median Program Completions	78	6
	15	YoY Median Prog. Compl. Change (Units)	-4	-1
	53	YoY Median Prog. Compl. Change (%)	-5%	0
In-Market Saturation	90	Google Search * Cost per Click**	\$17	-3
	44	Google Competition Index**	0.36	0
National Online Competition	86	National Online Institutions (Units)**	4	NS
	57	Nat'l Online % of Institutions	1%	NS
	60	Nat'l Online % of Completions	1%	NS

Program Scorecard: Degree Fit

A Bachelor's degree is an appropriate degree level for this program.

- 80% of completions are at the Bachelor's level.
- 52% of the national workforce hold a bachelor's degree.

National Completions by Level
Score: 0

Award Level	Completions (National)	Completions (Market)	Enrollment (Market)
Certificate	0%	0%	0%
Associates	1%	1%	4%
Bachelors	80%	80%	86%
Postbaccalaureate Certificate	0%	0%	0%
Masters	15%	15%	6%
Post-masters Certificate	0%	0%	0%
Doctoral	4%	4%	3%
Unknown	0%	0%	0%

Degree Fit:

Score: 0 Percentile: 50

National Workforce Ed. Attainment

Score: 0

Award Level	BLS Educational Attainment
No College	5%
Some College	7%
Associates	8%
Bachelors	52%
Masters	24%
Doctoral	5%

Program Scorecard: Mechanical Engineering ranks in the 99th percentile.

CIP: 14.1901 Mechanical Engineering	Market: National	Total Score: 41	Percentile: 99
--	-------------------------	------------------------	-----------------------

Student Demand

Score: 27 Percentile: 99

Category	Pctl	Criterion	Value	Score
Size	99	Enrollment Volume (3 Terms)	14,994	2
	0	Int'l Page Views (12 Months)	0	NS
	89	Google Search Volume (3 Months)*	127,400	6
	99	On-ground Completions at In-Market Institutions	37,750	8
	92	Online Completions by In-Market Students	201	2
	99	Sum of On-ground and Online Completions	37,951	4
Growth	97	Enrollment Volume YoY Change (Units)	309	NS
	91	Google Search YoY Change (Units)*	20,710	2
	98	Completion Volume YoY Change (Units)	608	3
	56	Enrollment Volume YoY Change (%)	2%	NS
	75	Google Search YoY Change (%)*	19%	0
55	Completion Volume YoY Change (%)	2%	0	

Competitive Intensity

Score: -1 Percentile: 84

Category	Pctl	Criterion	Value	Score
Volume of In-Market Competition	97	Campuses with Graduates**	356	-6
	98	Campuses with Grads YoY Change (Units)**	10	-3
	88	Institutions with Online In-Market Students**	4	NS
In-Market Program Sizes	99	Average Program Completions	106	6
	99	Median Program Completions	78	6
	15	YoY Median Prog. Compl. Change (Units)	-4	-1
	53	YoY Median Prog. Compl. Change (%)	-5%	0
In-Market Saturation	90	Google Search * Cost per Click**	\$17	-3
	44	Google Competition Index**	0.36	0
National Online Competition	86	National Online Institutions (Units)**	4	NS
	57	Nat'l Online % of Institutions	1%	NS
	60	Nat'l Online % of Completions	1%	NS

Employment*

Score: 15 Percentile: 99

Category	Pctl	Criterion	Value	Score
Size: Direct Prep	97	Job Postings Total (12 Months)*	169,470	2
	93	BLS Current Employment*	339,084	1
	90	BLS Annual Job Openings*	20,642	NS
	99	Job Postings Total (12 Months)*	207,362	NS
Size: Bachelors with ACS	98	BLS Current Employment*	641,473	NS
	42	BLS 1-Year Historical Growth*	-4.4%	NS
Growth (Direct Prep)	75	BLS 3-Year Historic Growth (CAGR)*	2.7%	0
	32	BLS 10-Year Future Growth (CAGR)*	0.3%	-1
Saturation (Direct Prep)	69	Job Postings per Graduate*	3.6	0
	47	BLS Job Openings per Graduate*	0.4	NS
Wages (Direct Prep)	91	BLS 10th-Percentile Wages*	\$60,270	NS
	86	BLS Mean Wages*	\$92,920	NS
American Community Survey Outcomes	95	Wages (Age < 30)	\$66,235	9
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	54	% with Any Graduate Degree	42%	NS
	82	% with Masters	34%	NS
	52	% with Doct/Prof Degree	7%	NS
	65	% Unemp. (Age <30)**	3%	-1
73	% Unemp. (Age 30-60)**	2%	-1	
92	% in Direct Prep Jobs	37%	NS	

CIP Description:
 A program that prepares individuals to apply mathematical and scientific principles to the design, development and operational evaluation of physical systems used in manufacturing and end-product systems used for specific uses, including machine tools, jigs and other manufacturing equipment; stationary power units and appliances; engines; self-propelled vehicles; housings and containers; hydraulic and electric systems for controlling movement; and the integration of computers and remote control with operating systems.

Degree Fit:

Score: 0 Percentile: 50

Category	Pctl	Criterion	Value	Score
NHEBI Nat'l 2 Year		Cost Index**	NA	NS
		Student: Faculty Index	NA	NS

National Completions by Level

Score: 0

Award Level	Completions (National)	Completions (Market)	Enrollment (Market)
Certificate	0%	0%	0%
Associates	1%	1%	4%
Bachelors	80%	80%	86%
Postbaccalaureate Certificate	0%	0%	0%
Masters	15%	15%	6%
Post-masters Certificate	0%	0%	0%
Doctoral	4%	4%	3%
Unknown	0%	0%	0%

National Workforce Ed. Attainment

Score: 0

Award Level	BLS Educational Attainment
No College	5%
Some College	7%
Associates	8%
Bachelors	52%
Masters	24%
Doctoral	5%

Total Percentile	0	20+	40+	70+	90+	95+	98+	100
Total Score	-45	-20	-16	0	12	19	26	50

** Color Scale in Reverse

Percentile (Reverse)	<02	02+	05+	10+	30+	60+
----------------------	-----	-----	-----	-----	-----	-----



* - Google search, employment data and Jobs Per Grad Ratio do not filter by award level.
 ** - Color scale in reverse.
 NA - No data available/not currently tracked.
 NS - Not Scored in Rubric (values = 0).
 2-Yr - Associates & certificate programs only.
 PCTL - Percentile

Agenda

Google Search

International Student Demand

Enrollment

Employment Trends

Non-Degree Courses

Program of the Month

Summary

Summary

- U.S. Google searches increased 18% year-over-year in May.
 - Searches for college brands rose 22%.
- In Fall 2021, enrollment in Bachelor's of Multidisciplinary Studies grew the fastest year-over-year.
 - At the Master's level, Behavioral Sciences grew the fastest.
- Registered Nurses and Managers had the highest volume of job postings.
 - Postings for medical records technicians increased 159% year-over-year.
- Demand for Mechanical Engineering programs at the Bachelor's level is high.
 - Employment opportunities are strong.
 - But the student market appears to be approaching saturation.
- Graduates of Mechanical Engineering programs have many employment options, and typically earn high wages.

Upcoming Webinars

Topic	Date
Demand Trends Webcast: Community Colleges	<i>Wednesday</i> July 27 th at 2:00 pm ET
Demand Trends Webcast: Bachelor's and Above	<i>Thursday</i> July 28 th at 2:00 pm ET

Contact:
Robert Atkins
RobertGrayAtkins.com

