

Field of Bachelor's Degree in the United States: 2022¹

American Community Survey Reports

By Kevin McElrath

ACS-59

July 2025

INTRODUCTION

According to the American Community Survey (ACS), 35.7 percent of adults aged 25 and over had a bachelor's degree or higher in 2022. As more individuals obtain bachelor's degrees, it is important to understand differences in the types of degrees that people have. The field of degree (FOD) that individuals obtain affects the occupation they pursue, the economic returns they can anticipate from obtaining their degree, and even where they choose to live.

This report examines fields of bachelor's degree in the United States using the 2022 ACS 1-year dataset.² It explains how field of degree varies by social, demographic, and geographic characteristics and differences in median annual earnings by field of degree.

The ACS first collected data on field of bachelor's degree in 2009. Respondents with a bachelor's degree or higher were asked to write in the specific field(s) for the bachelor's degree they earned.³ Fields of degree are grouped in two ways in this report based on similarities among degree. First, a broad

¹The U.S. Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product. Data Management System number: P-7533599 and Disclosure Review Board approval number: CBDRB-FY25-SEHSD003-011.

²"Field of bachelor's degree" refers to the specialized area of study (also referred to as majors) in which a bachelor's degree was awarded. It does not refer to type of bachelor's degree, such as bachelor's of science or arts.

³ Respondents can provide more than one field of degree on the ACS, and up to four of these majors are coded to a specific degree. This report focuses only on the first degree listed.

FIELD OF DEGREE DATA

The U.S. Census Bureau codes field of degree write-in responses into 191 unique fields of degree. These codes aim to align with the Classification of Instructional Programs (CIP) codes that were developed and released by the Department of Education in conjunction with higher education institutions. The number of fields of degree has been the same since 2010. Updates are made when discrete fields of study are identified that have enough degree holders.

group of fields of degree with the categories: science and engineering; science- and engineering-related fields; business; education; and arts, humanities, and other.⁴ In addition to these broader categories, the report also presents a more detailed breakdown of the 30 most common individual fields of degree (e.g., sociology), with the remaining fields collapsed into four subject-based "other" categories (e.g., other science and engineering degrees).

HIGHLIGHTS

- The five most common fields of degree in 2022 among the population aged 25 and over were business management and administration (4.8 million), psychology (3.7 million), general business (3.7 million), nursing (3.6 million), and general education (3.1 million).

⁴ Some examples of science- and engineering-related fields include nursing, science teacher education, and computer programming.

- Fields of degree in engineering and its subfields (general, civil, electric, and mechanical), computer science, finance, and economics were populated disproportionately by men (67–90 percent). In contrast, 71–92 percent of people who held degrees in psychology, education (general and elementary), social work, nursing, and family and consumer sciences were women.
- The percentage of people with fields of degree in science and engineering varied across both states and metropolitan areas. Washington was the state with the highest rate at 43.8 percent, and San Francisco had the highest rate among the 30 largest metropolitan areas covered in this report, at 44.3 percent.
- The field of degree with the highest median annual earnings was electrical engineering (\$121,600) and the lowest was family and consumer sciences (\$52,850).
- Women earned less than men across all fields of degree presented in this report, ranging from 70.8 to 90.5 percent of men's earnings.
- Median annual earnings within the same field of degree varied by race and Hispanic origin. Earnings for electrical engineering degree holders ranged from \$129,800 for degree holders who were Asian alone to \$87,920 for those who were Black alone.
- Median annual earnings within the same field of degree varied across metropolitan areas. Business degree holders living

in San Francisco had median annual earnings of \$119,692, compared with \$64,911 in Las Vegas and \$80,570 nationally.

FIELD OF DEGREE IN THE UNITED STATES

Table 1 presents the number of people aged 25 and over who obtained a degree in one of the 30 most common fields of degree in the United States in 2022, as well as four categories of “other” FOD groups by broad category of degree (e.g., other science and engineering degrees).⁵ The five most common fields of degree in 2022 were business management and administration (4.8 million), psychology (3.7 million), general business (3.7 million), nursing (3.6 million), and general education (3.1 million). Among bachelor's degree holders, about 68 percent had degrees in the 30 detailed fields listed.

Deciding on a specific major in college is a complex process accounting for personal interest and desired career. Potential career earnings are a significant element of this decision-making process, and this is especially relevant as the costs of higher education continue to rise. Table 2 presents median annual earnings by field of degree among the working-age population (aged 25–64 with earnings).⁶ The field of degree with the highest earnings was electrical engineering (\$121,600) and the lowest was

⁵ Appendix Table A-1a lists the detailed fields of degree included in each “other” group.

⁶ These estimates include all people (within the age group) that have each field of degree, regardless of occupation. Field of degree and occupation are examined later in the report.

family and consumer sciences (\$52,850). Other fields with relatively high earnings included computer science (\$108,500), mechanical engineering (\$106,200), economics (\$101,400), finance (\$99,900), and civil engineering (\$99,660). In contrast, some fields of degree with median annual earnings of less than \$60,000 were education degrees (earnings for general education was \$58,000, elementary education was \$54,900, and other education degrees was \$58,120), social work (\$55,060), and fine arts (\$53,450). Degrees within the broader categories of science and engineering (as well as business) had higher median earnings (\$84,930 and \$80,570, respectively) compared to those in education (\$57,090) and arts, humanities, and other degrees (\$62,740).⁷ These estimates provide a baseline for how earnings varied by field of degree and contextualize the demographic, occupational, and geographic differences explored later in this report.

FIELD OF DEGREE BY SELECT CHARACTERISTICS

Field of Degree by Sex

Among people aged 25 and over with a bachelor's degree or higher in 2022, 47.2 percent were men and 52.8 percent were women. Figure 1 presents the percentage of men and women within each degree among the population aged 25 and over. An important consideration for these data is degrees for which certain groups were over- or

⁷ These estimates are discussed in greater detail later in the report and are available in Table 8.

Table 1.

Detailed Field of Bachelor's Degree for First Major: 2022

Population aged 25 and over with a bachelor's degree or higher	Estimate	Margin of error (\pm)	Percent	Margin of error (\pm)
Total.....	81,910,000	275,900	X	X
Science and Engineering Degrees				
Computer science.....	1,797,000	24,270	2.2	0.03
Engineering.....	910,400	19,360	1.1	0.02
Civil engineering.....	732,200	16,850	0.9	0.02
Electrical engineering.....	1,537,000	23,690	1.9	0.03
Mechanical engineering.....	1,294,000	22,380	1.6	0.03
Mathematics.....	1,049,000	17,120	1.3	0.02
Biology.....	2,700,000	29,960	3.3	0.03
Chemistry.....	885,100	16,400	1.1	0.02
Psychology.....	3,743,000	36,960	4.6	0.04
Economics.....	1,607,000	20,870	2.0	0.03
Political science.....	1,825,000	24,380	2.2	0.03
Sociology.....	1,231,000	19,600	1.5	0.02
Nursing.....	3,638,000	37,870	4.4	0.04
Other science and engineering ¹	14,550,000	79,200	17.8	0.07
Business Degrees				
General business.....	3,666,000	36,260	4.5	0.05
Accounting.....	2,931,000	30,020	3.6	0.04
Business management and administration.....	4,826,000	45,440	5.9	0.05
Marketing.....	1,718,000	26,620	2.1	0.03
Finance.....	1,600,000	22,150	2.0	0.03
Other business.....	1,799,000	28,430	2.2	0.03
Education Degrees				
General education.....	3,109,000	36,580	3.8	0.05
Elementary education.....	2,536,000	29,430	3.1	0.03
Other education.....	3,417,000	34,800	4.2	0.04
Arts, Humanities, and Other Degrees				
Communications.....	1,834,000	24,970	2.2	0.03
English language and literature.....	2,336,000	24,640	2.9	0.03
Liberal arts.....	976,800	14,210	1.2	0.02
History.....	1,667,000	23,420	2.0	0.03
Fine arts.....	922,500	17,360	1.1	0.02
Commerical art and graphic design.....	808,100	17,900	1.0	0.02
Family and consumer sciences.....	676,700	12,710	0.8	0.02
Physical fitness, parks, recreation, and leisure.....	911,300	18,380	1.1	0.02
Criminal justice and fire protection.....	1,528,000	25,380	1.9	0.03
Social work.....	819,500	16,000	1.0	0.02
Other degrees.....	6,335,000	53,600	7.7	0.06

X Not applicable.

¹ Science- and engineering-related fields are included within the "Other science and engineering degrees" category.

Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates, <www.census.gov/acs>.

underrepresented. For example, a degree with an overrepresentation of men would have a higher percentage of degree holders who were men than the total universe of bachelor's degree holders that is male (47.2 percent).

Overrepresentation of one group also implies underrepresentation of one or more other groups. Over- and underrepresentation are evident in the chart by looking at where each field of degree falls in reference to the "all bachelor's degree holders" category.

Degrees in engineering and its subfields (general, civil, electric, and mechanical), computer science, finance, and economics were held disproportionately by men, with 67 to 90 percent of degree holders being men.

Table 2.

Median Annual Earnings by Field of Bachelor's Degree and Sex for First Major: 2022

Population aged 25 to 64 with a bachelor's degree or higher with earnings	Total population		Men		Women		Women's earnings as a percentage of men's earnings	
	Earnings	Margin of error (±)	Earnings	Margin of error (±)	Earnings	Margin of error (±)	Estimate	Margin of error (±)
Total.	74,150	166	89,300	358	63,230	132	70.8	0.3
Science and Engineering Degrees								
Computer science	108,500	1,597	115,500	1,749	91,990	2,082	79.6	2.2
Engineering	100,600	1,031	103,300	1,409	76,160	6,168	73.7	6.1
Civil engineering	99,660	1,702	101,900	1,048	86,590	3,583	85.0	3.6
Electrical engineering	121,600	1,239	123,800	1,203	105,200	2,719	85.0	2.3
Mechanical engineering	106,200	957	108,000	1,584	92,380	3,243	85.5	3.3
Mathematics	86,560	1,476	99,050	3,109	73,500	1,814	74.2	3.0
Biology	81,550	707	96,620	2,112	72,200	961	74.7	1.9
Chemistry	94,680	2,114	103,000	1,802	80,180	3,164	77.8	3.4
Psychology	62,270	488	76,090	1,168	58,490	806	76.9	1.6
Economics	101,400	916	107,300	1,277	84,750	2,198	79.0	2.3
Political science	86,380	1,325	94,950	2,075	77,090	1,463	81.2	2.3
Sociology	63,660	837	75,030	3,295	59,470	1,082	79.3	3.8
Nursing	79,600	813	90,890	1,569	77,640	784	85.4	1.7
Other science and engineering ¹	77,910	460	92,050	425	65,150	430	70.8	0.6
Business Degrees								
General business	80,120	711	90,080	1,351	66,690	1,431	74.0	1.9
Accounting	84,880	1,051	100,000	1,751	75,010	1,155	75.0	1.7
Business management and administration ...	75,600	581	87,090	950	63,640	588	73.1	1.0
Marketing	75,930	799	89,420	2,472	66,090	1,402	73.9	2.6
Finance	99,900	1,779	106,400	1,202	79,940	1,713	75.1	1.8
Other business	77,160	882	91,000	1,361	64,900	1,218	71.3	1.7
Education Degrees								
General education	58,000	731	68,420	2,078	55,030	568	80.4	2.6
Elementary education	54,900	550	64,380	2,283	54,070	544	84.0	3.1
Other education	58,120	478	66,560	897	54,600	481	82.0	1.3
Arts, Humanities, and Other Degrees								
Communications	67,840	1,017	75,400	1,336	64,130	780	85.1	1.8
English language and literature	65,060	927	75,850	1,488	61,150	820	80.6	1.9
Liberal arts	61,380	1,044	70,850	3,288	55,790	1,988	78.7	4.6
History	73,560	1,006	81,270	1,116	62,980	1,455	77.5	2.1
Fine arts	53,450	1,303	60,900	1,630	49,530	1,767	81.3	3.6
Commerical art and graphic design	59,770	1,049	69,930	1,932	54,350	1,047	77.7	2.6
Family and consumer sciences	52,850	952	70,440	6,831	51,590	1,157	73.2	7.3
Physical fitness, parks, recreation, and leisure	61,580	691	65,120	1,259	55,600	1,458	85.4	2.8
Criminal justice and fire protection	64,690	809	74,250	1,150	54,150	830	72.9	1.6
Social work	55,060	838	60,090	2,905	54,380	743	90.5	4.5
Other degrees	62,100	420	69,830	904	55,740	639	79.8	1.4

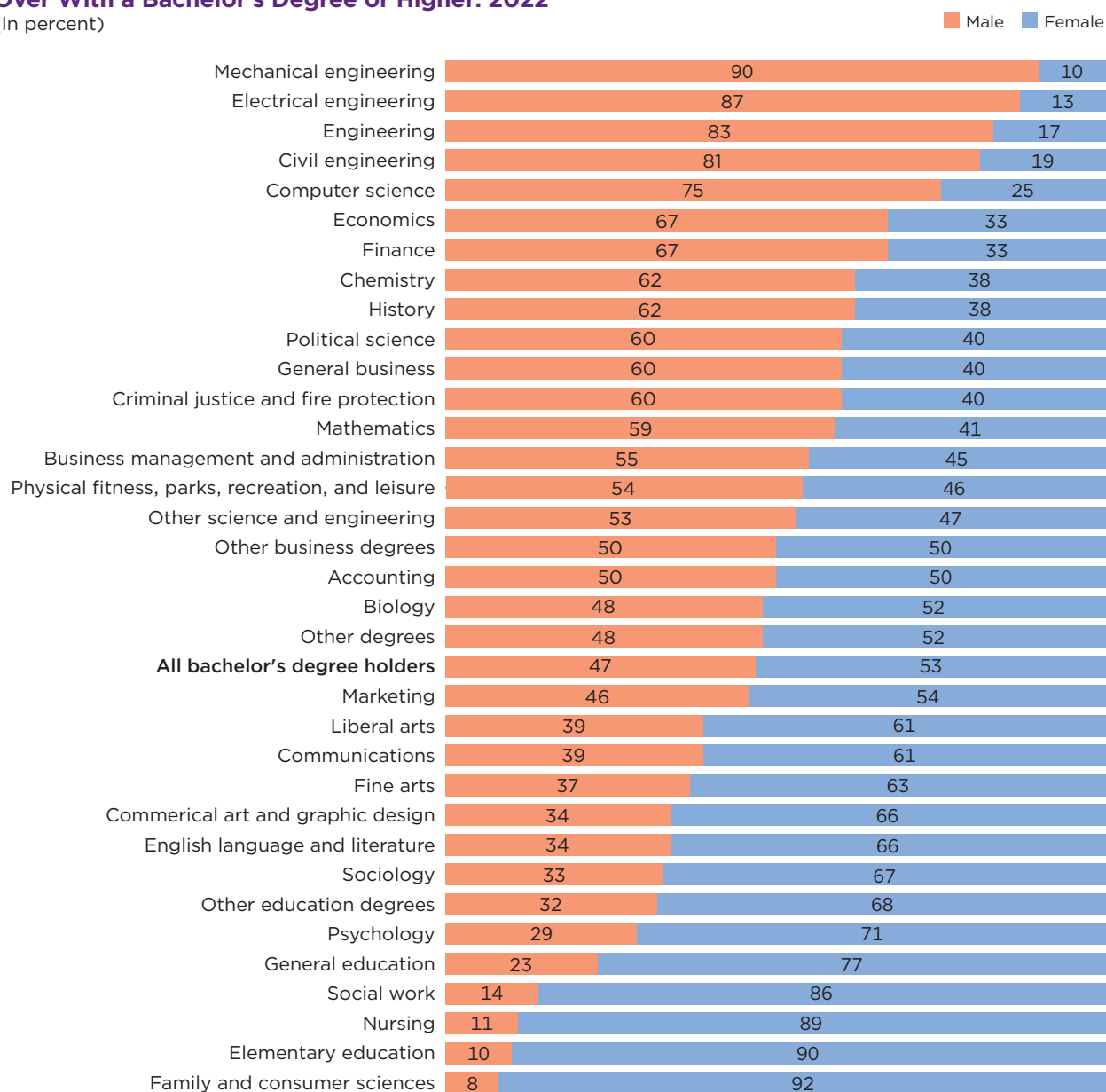
¹ Science- and engineering-related fields are included within the "Other science and engineering" degrees category.

Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates, <www.census.gov/acs>.

Figure 1.

Field of Bachelor's Degree for First Major by Sex for the Population Aged 25 and Over With a Bachelor's Degree or Higher: 2022

(In percent)



Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates, <www.census.gov/acs>.

In contrast, degrees in psychology, education (general and elementary), social work, nursing, and family and consumer sciences had an overrepresentation of women, with 71–92 percent of degree holders being female. Some degrees had relative parity by sex. For example, in biology,

accounting, and marketing, 46–50 percent of degree holders were male.

In addition to median earnings for all degree holders, Table 2 lists median annual earnings for each field of degree by sex. Among all people with a bachelor's degree

or higher, women's earnings (\$63,230) were 70.8 percent of men's (\$89,300). Women earned less than men across all fields of degree presented in Table 2. These differences existed in both male- and female-dominated fields of degree. For example, in a male-dominated field like engineering,

women's median annual earnings were \$76,160, compared to \$103,300 for men. In female-dominated fields like psychology, earnings gaps also existed, with median annual earnings of \$76,090 for men and \$58,490 for women. The smallest relative difference in earnings was for social work degree holders, for which women's median annual earnings (\$54,380) were 90.5 percent of men's (\$60,090). Social work is a field of degree with relatively low median annual earnings, and previous research from the Census Bureau shows that female-dominated fields tend to have lower median earnings than male-dominated fields.⁸

Field of Degree by Age

Differences in the composition of fields of degree were also evident across age groups. These differences may emerge due to differences in labor markets and educational preferences at the time individuals obtained their degree. Twenty-two percent of people with a bachelor's degree or higher were aged 25 to 34, 21.8 percent were aged 35 to 44, 18.4 percent were aged 45 to 54, 16.1 percent were aged 55 to 64, and 21.8 percent were aged 65 or over. Table 3 presents the estimates and percentages of each field of degree by age. Physical fitness, parks, recreation, and leisure had an overrepresentation of young adults, as 45 percent of degree holders were aged 25–34. Additionally, the fields of criminal justice and fire protection (29.1 percent), commercial art and graphic design (29.1 percent),

⁸ For more information, refer to Kevin McElrath and Erik Hernandez, "Men Earned More Than Women Even When They Had Bachelor's Degrees in the Same Field," *America Counts*, 2023, <www.census.gov/library/stories/2023/12/education-does-not-resolve-gender-wage-gap.html>.

biology (29.0 percent), and computer science (28.6 percent) also had a disproportionately high representation of 25- to 34-year-olds. By contrast, other fields had relatively high rates of those aged 65 and over. Fields of degree in education had an overrepresentation of those aged 65 and over among the fields in Table 3, with elementary education (41.2 percent), other education degrees (40.5 percent), and general education (39.6 percent) all around 40 percent of degree holders aged 65 or over. For further context on the differences across age cohorts in education, 11.2 percent of people with degrees in elementary education were aged 25 to 34. These differences across age groups likely reflect trends in higher education across age cohorts and may relate to differences in both labor markets and personal preferences at the time the degree was awarded.⁹

Field of Degree by Race and Hispanic Origin

There were also notable distinctions in field of degree by race and Hispanic origin. Table 4 indicates that among bachelor's degree holders aged 25 and over, 68.5 percent were White alone, non-Hispanic; 8.1 percent were Black alone, non-Hispanic; 9.9 percent were Asian alone, non-Hispanic; 4.3 percent were Some Other Race or Multiracial; and 9.3

⁹ Median annual earnings by age and field of degree are not covered in this report. If it is of interest, refer to Table 3 in the table package "2022 American Community Survey Detailed Field of Degree and Median Annual Earnings Table Package" at <www.census.gov/data/tables/2022/demo/educational-attainment/acs-detailed-tables.html>.

percent were Hispanic (of any race).¹⁰

Some degrees with an overrepresentation of people who were White alone were elementary education (81.4 percent), history (80.2 percent), other education degrees (79.4 percent), and English language and literature (76.8 percent). Fields of degree with an overrepresentation of people who were Black alone included social work (16.2 percent), criminal justice and fire protection (15.5 percent), sociology (13.8 percent), and business management and administration (12.0 percent). By contrast, fields of degree with relatively high rates of people who were Asian alone were electrical engineering (29.3 percent), computer science (28.1 percent), and general engineering (18.4 percent). Finally, fields of degree with the highest percentage of Hispanic (of any race) degree holders included criminal justice and fire protection (14.3 percent), other business degrees (12.5 percent), general engineering (12.3 percent), and commercial art and graphic design (12.1 percent).

Table 5 details median annual earnings for each field of degree by race and Hispanic origin. Among all people with a bachelor's degree or higher, Asians had the highest median annual earnings (\$91,190), followed by White alone (\$76,430), other or multiple races (\$70,510), Black alone (\$62,000), and the Hispanic population (of any race) (\$61,500).¹¹

¹⁰ Throughout this report, all race group comparisons refer to single race alone, non-Hispanic groups or Hispanics (of any race). For the sake of brevity, we will omit the mention of "non-Hispanic" for the remainder of the text.

¹¹ The median earnings of Black alone and Hispanic (of any race) were not statistically different from one another.

Table 3.

Field of Bachelor's Degree for First Major by Age: 2022

Population aged 25 and over with a bachelor's degree or higher	25 and over		25 to 34		35 to 44		45 to 54		55 to 64		65 or over	
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent
Total	81,910,000	X	17,980,000	22.0	17,830,000	21.8	15,090,000	18.4	13,190,000	16.1	17,820,000	21.8
Science and Engineering Degrees												
Computer science.....	1,797,000	2.2	514,200	28.6	491,900	27.4	356,800	19.9	301,900	16.8	132,600	7.4
Engineering	910,400	1.1	167,800	18.4	181,800	20.0	176,200	19.4	169,700	18.6	215,000	23.6
Civil engineering.....	732,200	0.9	165,200	22.6	143,700	19.6	124,100	16.9	123,200	16.8	176,000	24.0
Electrical engineering	1,537,000	1.9	268,700	17.5	314,900	20.5	283,500	18.5	329,700	21.5	339,800	22.1
Mechanical engineering	1,294,000	1.6	345,300	26.7	245,000	18.9	213,300	16.5	229,600	17.7	261,200	20.2
Mathematics.....	1,049,000	1.3	190,600	18.2	171,700	16.4	159,600	15.2	177,900	17.0	348,700	33.3
Biology	2,700,000	3.3	782,800	29.0	585,600	21.7	484,400	17.9	348,500	12.9	498,500	18.5
Chemistry	885,100	1.1	165,900	18.7	152,300	17.2	143,100	16.2	151,700	17.1	272,100	30.7
Psychology.....	3,743,000	4.6	1,003,000	26.8	888,200	23.7	717,800	19.2	465,800	12.4	668,400	17.9
Economics	1,607,000	2	354,200	22.0	330,500	20.6	279,800	17.4	302,800	18.8	339,500	21.1
Political science.....	1,825,000	2.2	383,400	21.0	404,800	22.2	361,600	19.8	290,600	15.9	384,300	21.1
Sociology	1,231,000	1.5	236,400	19.2	259,000	21.0	226,500	18.4	157,000	12.8	352,000	28.6
Nursing	3,638,000	4.4	807,300	22.2	769,800	21.2	664,400	18.3	601,000	16.5	795,300	21.9
Other science and engineering ¹	14,550,000	17.8	3,838,000	26.4	3,252,000	22.4	2,613,000	18.0	2,172,000	14.9	2,670,000	18.4
Business Degrees												
General business.....	3,666,000	4.5	601,400	16.4	786,300	21.5	717,700	19.6	738,500	20.1	821,700	22.4
Accounting.....	2,931,000	3.6	513,800	17.5	562,600	19.2	588,300	20.1	625,000	21.3	641,600	21.9
Business management and administration	4,826,000	5.9	799,500	16.6	1,076,000	22.3	958,400	19.9	1,005,000	20.8	987,000	20.5
Marketing	1,718,000	2.1	433,400	25.2	435,000	25.3	340,900	19.8	306,700	17.8	202,200	11.8
Finance	1,600,000	2	426,500	26.7	409,100	25.6	319,800	20.0	273,800	17.1	170,600	10.7
Other business.....	1,799,000	2.2	473,500	26.3	475,300	26.4	393,000	21.8	273,200	15.2	183,900	10.2
Education Degrees												
General education	3,109,000	3.8	342,800	11.0	505,700	16.3	525,700	16.9	502,100	16.2	1,232,000	39.6
Elementary education	2,536,000	3.1	284,300	11.2	414,600	16.3	398,400	15.7	393,700	15.5	1,045,000	41.2
Other education	3,417,000	4.2	444,500	13.0	543,800	15.9	490,900	14.4	552,500	16.2	1,385,000	40.5
Arts, Humanities, and Other Degrees												
Communications.....	1,834,000	2.2	498,900	27.2	505,800	27.6	388,500	21.2	265,300	14.5	175,800	9.6
English language and literature.....	2,336,000	2.9	389,900	16.7	481,700	20.6	456,600	19.5	342,100	14.6	666,100	28.5
Liberal arts	976,800	1.2	160,100	16.4	216,400	22.2	195,100	20.0	172,900	17.7	232,200	23.8
History.....	1,667,000	2	271,800	16.3	344,000	20.6	310,100	18.6	239,900	14.4	500,800	30.0
Fine arts	922,500	1.1	160,100	17.4	202,400	21.9	173,800	18.8	148,300	16.1	237,900	25.8
Commercial art and graphic design	808,100	1	234,800	29.1	232,400	28.8	143,100	17.7	113,100	14.0	84,720	10.5
Family and consumer sciences	676,700	0.8	148,100	21.9	137,800	20.4	108,800	16.1	98,550	14.6	183,500	27.1
Physical fitness, parks, recreation, and leisure	911,300	1.1	410,200	45.0	233,600	25.6	147,800	16.2	64,280	7.1	55,350	6.1
Criminal justice and fire protection.....	1,528,000	1.9	443,900	29.1	404,400	26.5	338,500	22.2	198,100	13.0	142,900	9.4
Social work.....	819,500	1	177,300	21.6	173,900	21.2	160,400	19.6	126,100	15.4	181,800	22.2
Other degrees	6,335,000	7.7	1,547,000	24.4	1,496,000	23.6	1,133,000	17.9	927,000	14.6	1,232,000	19.4

X Not applicable.

¹ Science- and engineering-related fields are included within the "Other science and engineering" degrees category.

Note: Margins of error are available in Table A-2.

Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates, <www.census.gov/acs>.

Table 4.

Field of Bachelor's Degree for First Major by Race and Hispanic Origin: 2022

Population aged 25 and over with a bachelor's degree or higher	White alone, non-Hispanic		Black alone, non-Hispanic		Asian alone, non-Hispanic		Some Other Race or Multiracial, non-Hispanic		Hispanic (of any race)	
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent
Total	56,070,000	68.5	6,658,000	8.1	8,086,000	9.9	3,485,000	4.3	7,605,000	9.3
Science and Engineering Degrees										
Computer science	923,600	51.4	138,100	7.7	504,200	28.1	82,310	4.6	149,100	8.3
Engineering	534,900	58.7	57,570	6.3	167,500	18.4	38,260	4.2	112,200	12.3
Civil engineering	480,100	65.6	33,070	4.5	112,900	15.4	27,790	3.8	78,360	10.7
Electrical engineering	822,500	53.5	79,820	5.2	450,500	29.3	56,560	3.7	127,200	8.3
Mechanical engineering	870,100	67.2	46,810	3.6	225,000	17.4	49,940	3.9	102,600	7.9
Mathematics	747,900	71.3	65,390	6.2	132,100	12.6	41,930	4.0	61,250	5.8
Biology	1,793,000	66.4	207,400	7.7	343,500	12.7	123,100	4.6	232,500	8.6
Chemistry	574,200	64.9	59,000	6.7	157,800	17.8	34,630	3.9	59,450	6.7
Psychology	2,554,000	68.2	366,000	9.8	219,400	5.9	187,500	5.0	415,800	11.1
Economics	1,058,000	65.8	95,200	5.9	254,600	15.8	65,350	4.1	133,700	8.3
Political science	1,311,000	71.8	150,500	8.2	118,400	6.5	78,090	4.3	166,800	9.1
Sociology	793,300	64.5	169,600	13.8	79,460	6.5	59,170	4.8	129,300	10.5
Nursing	2,411,000	66.3	349,500	9.6	424,500	11.7	143,400	3.9	309,600	8.5
Other science and engineering ¹	9,525,000	65.5	1,075,000	7.4	1,900,000	13.1	665,500	4.6	1,379,000	9.5
Business Degrees										
General business	2,577,000	70.3	312,300	8.5	325,100	8.9	149,700	4.1	301,500	8.2
Accounting	1,923,000	65.6	246,900	8.4	353,100	12.0	104,800	3.6	303,300	10.3
Business management and administration	3,138,000	65.0	577,000	12.0	346,300	7.2	202,600	4.2	561,700	11.6
Marketing	1,260,000	73.3	130,200	7.6	101,800	5.9	67,470	3.9	158,900	9.2
Finance	1,118,000	69.9	105,600	6.6	171,100	10.7	65,410	4.1	139,600	8.7
Other business degrees	1,118,000	62.1	173,900	9.7	200,200	11.1	82,520	4.6	224,800	12.5
Education Degrees										
General education	2,260,000	72.7	261,400	8.4	157,200	5.1	117,000	3.8	313,300	10.1
Elementary education	2,064,000	81.4	163,800	6.5	77,880	3.1	77,590	3.1	153,000	6.0
Other education degrees	2,712,000	79.4	254,700	7.5	109,100	3.2	114,500	3.3	226,100	6.6
Arts, Humanities, and Other Degrees										
Communications	1,322,000	72.1	165,700	9.0	90,620	4.9	82,290	4.5	173,300	9.4
English language and literature	1,795,000	76.8	127,100	5.4	172,000	7.4	93,580	4.0	148,400	6.4
Liberal arts	665,400	68.1	84,150	8.6	76,430	7.8	43,700	4.5	107,100	11.0
History	1,337,000	80.2	82,550	5.0	77,780	4.7	62,890	3.8	106,100	6.4
Fine arts	673,200	73.0	48,720	5.3	81,270	8.8	43,160	4.7	76,130	8.3
Commerical art and graphic design	549,300	68.0	42,530	5.3	80,030	9.9	38,440	4.8	97,750	12.1
Family and consumer sciences	482,300	71.3	56,090	8.3	54,530	8.1	24,190	3.6	59,640	8.8
Physical fitness, parks, recreation, and leisure	663,800	72.8	74,790	8.2	40,480	4.4	44,370	4.9	87,870	9.6
Criminal justice and fire protection	958,200	62.7	237,300	15.5	42,780	2.8	70,310	4.6	219,100	14.3
Social work	526,900	64.3	132,900	16.2	31,890	3.9	33,600	4.1	94,150	11.5
Other degrees	4,531,000	71.5	487,600	7.7	406,800	6.4	313,800	5.0	595,900	9.4

¹ Science- and engineering-related fields are included within the "Other science and engineering" degrees category.

Note: Margins of error are available in Table A-3.

Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates, <www.census.gov/acs>.

Even among specific fields of degree, earnings fluctuated by race and Hispanic origin. One example from relatively high-earning fields is electrical engineering. Earnings ranged from \$129,800 for degree holders who were Asian alone to \$87,920 for those who were Black alone. Put differently, Black electrical engineering degree holders earned roughly 68 percent of what their Asian counterparts in the same field earned.

Similar patterns existed for relatively low-earning fields. For example, median annual earnings for fine arts degree holders ranged from \$60,970 for people who were Asian alone to \$47,340 for those who were Hispanic (of any race). These results show that even among people with the same field of degree, earnings differed by race and Hispanic origin. These estimates alone do not explain why these differences exist, but they do provide a baseline for an examination of racial disparities in earnings by field of degree.

Field of Degree by Advanced Degree Attainment

In 2022, roughly 40 percent of bachelor's degree holders had also obtained an advanced degree such as a master's degree (28.2 percent), a professional degree such as a doctor of medicine (6.5 percent), or a doctorate (4.7 percent).¹² Figure 2 presents the percentage of degree holders within each field of study that had a bachelor's degree only or had completed any advanced degree (master's, professional, or doctorate combined). The rate of people with advanced degrees

varied from around 60 percent for chemistry (64 percent) and biology (60.5 percent) to under 20 percent for marketing (18.2 percent) and commercial art and graphic design (12.2). Biology and political science stood out as degrees with high rates of advanced degree attainment, which may represent students who were preparing to enter the fields of law and medicine. Marketing and commercial art and graphic design had low rates of advanced degree attainment, with over 80 percent of degree holders having a bachelor's degree as their terminal degree. These differences provide descriptive evidence suggesting that to fully utilize a bachelor's degree in particular fields, one might be incentivized to pursue advanced degrees. ACS data do not allow us to assess whether individuals stayed in a similar field for their advanced degree, as the survey does not collect data on field of advanced degree.

Table 6 presents median annual earnings for each field of degree by attainment of an advanced degree and bachelor's degree only. It also presents bachelor's-only earnings as a percentage of advanced degree earnings. For the total population aged 25 to 64 with a bachelor's degree or higher, median annual earnings for those with a bachelor's degree were \$66,410, compared to \$86,120 for those with any advanced degree. Advanced degree holders earned significantly more than bachelor's degree holders across all fields, but the differences in earnings across fields of degree varied. Some fields with relatively high returns to obtaining an advanced degree included biology (\$60,390 for bachelor's only and \$102,800 for advanced degree holders) and political science (\$72,420 for bachelor's only and \$102,700 for advanced

degrees). Bachelor's degree holders in biology earned only 58.7 percent of what advanced degree holders earned, and political science bachelor's degree holders earned 70.5 percent. These large returns may relate to these undergraduate degrees feeding into medical and law advanced degrees. By contrast, there were some fields of degree in which the economic returns to pursuing an advanced degree were relatively low. For example, people with bachelor's degree in marketing earned 82.7 percent of what advanced degree holders earned (\$73,440 versus \$88,750). Further, people with bachelor's degrees in civil engineering earned 87.8 percent of what advanced degree holders earned (\$94,370 compared to \$107,500).

FIELD OF DEGREE BY OCCUPATION

The choice of field of degree is likely to be motivated by expected future job prospects and the type of work typically done with the degree. While not the focus of this report, the relationship between field of degree and occupation may directly influence the relationship between field of degree and earnings. This report uses groups of occupations to discern the types of work that people were engaged in across fields of degree.

The most common occupation group among people aged 25 to 64 with a bachelor's degree or higher was management, business, and financial occupations (28.7 percent) followed by education, legal, community service, arts, and media occupations (22 percent); sales and office occupations (14 percent); computer, engineering, and science occupations (13.6 percent); and healthcare practitioner and technical occupations (10.7 percent).

¹² The remainder of this section focuses broadly on "advanced degrees." For a more detailed breakdown of advanced degree attainment by field of degree, refer to Table 1 in "2022 American Community Survey Detailed Field of Degree and Median Annual Earnings Table Package" at <www.census.gov/data/tables/2022/demo/educational-attainment/acs-detailed-tables.html>.

Table 5.

Median Annual Earnings by Field of Bachelor's Degree for First Major and Race and Hispanic Origin: 2022

Population aged 25 to 64 with a bachelor's degree or higher with earnings	White alone, non-Hispanic		Black alone, non-Hispanic		Asian alone, non-Hispanic		Some Other Race or Multiracial, non-Hispanic		Hispanic (of any race)	
	Earnings	Margin of error (±)	Earnings	Margin of error (±)	Earnings	Margin of error (±)	Earnings	Margin of error (±)	Earnings	Margin of error (±)
Total	76,430	149	62,000	362	91,190	563	70,510	797	61,500	356
Science and Engineering Degrees										
Computer science	113,600	2,409	76,950	3,757	120,700	2,408	104,300	4,868	86,080	3,530
Engineering	104,400	1,555	86,070	7,068	110,900	6,541	89,810	12,000	69,480	8,901
Civil engineering	104,100	1,803	73,580	8,934	97,950	3,772	91,530	8,235	80,660	4,894
Electrical engineering	124,500	1,486	87,920	10,140	129,800	3,076	114,500	15,580	90,580	4,793
Mechanical engineering	109,400	1,988	85,350	4,646	112,700	3,619	101,900	8,043	84,040	5,376
Mathematics	89,790	2,569	72,510	7,238	100,500	4,737	91,560	6,909	65,330	5,263
Biology	83,390	1,109	63,750	2,385	100,100	5,563	77,780	5,144	69,300	3,533
Chemistry	100,400	2,130	72,210	6,923	101,100	3,937	87,240	11,670	71,490	6,386
Psychology	64,430	637	56,150	2,314	73,570	2,482	60,480	1,980	54,190	1,400
Economics	107,400	1,438	73,590	6,897	97,230	5,569	100,600	7,658	76,460	4,040
Political science	93,760	1,752	63,390	1,773	85,540	6,805	81,140	6,556	71,990	3,421
Sociology	66,250	1,537	57,660	2,549	69,910	6,088	66,310	4,278	60,340	2,938
Nursing	78,940	889	80,870	1,765	88,390	3,072	78,550	3,200	70,100	2,593
Other science and engineering ¹	80,080	355	62,920	1,137	98,440	2,057	72,820	1,560	63,050	996
Business Degrees										
General business	85,100	905	60,690	2,015	75,650	2,936	80,320	3,975	65,900	3,280
Accounting	94,720	1,128	67,070	2,605	78,490	3,572	81,870	3,291	62,550	1,772
Business management and administration	82,290	599	61,890	1,127	75,610	2,604	71,910	2,148	59,780	1,644
Marketing	80,700	876	63,060	2,619	71,200	4,219	72,780	4,193	60,910	2,219
Finance	105,000	1,019	74,440	3,790	93,120	4,593	100,200	12,670	77,430	4,038
Other business	83,460	1,400	63,500	2,656	75,220	4,646	76,730	6,051	61,270	1,640
Education Degrees										
General education	59,870	689	54,740	1,636	58,580	4,667	56,420	2,543	52,110	1,323
Elementary education	55,100	554	60,010	2,596	51,170	2,302	52,230	2,307	52,920	2,113
Other education	59,000	492	56,360	1,662	56,240	3,802	55,700	1,775	53,320	1,649
Arts, Humanities, and Other Degrees										
Communications	71,290	983	59,010	2,692	74,680	3,871	62,330	3,002	60,240	2,470
English language and literature	66,990	1,161	61,750	2,781	64,800	3,472	63,070	3,208	56,890	2,545
Liberal arts	63,780	1,152	49,270	3,446	60,920	5,993	58,740	5,733	58,410	2,994
History	76,100	1,141	62,710	2,199	72,590	7,341	68,010	6,212	63,690	2,482
Fine arts	54,340	1,803	47,470	5,006	60,970	5,181	55,840	4,477	47,340	3,206
Commerical art and graphic design	61,930	1,022	52,240	2,693	63,190	2,653	53,630	2,707	50,870	2,641
Family and consumer sciences	53,020	1,182	51,220	2,286	62,000	3,520	51,860	3,839	49,620	3,152
Physical fitness, parks, recreation, and leisure	63,520	948	51,530	2,914	64,900	3,710	63,370	4,694	52,080	2,490
Criminal justice and fire protection	70,370	1,104	57,480	2,290	69,320	4,027	62,320	2,035	57,930	2,397
Social work	56,040	1,051	54,160	2,498	61,930	5,628	53,330	1,904	52,120	1,691
Other degrees	64,550	499	53,780	1,343	60,350	2,190	60,740	1,485	53,090	1,381

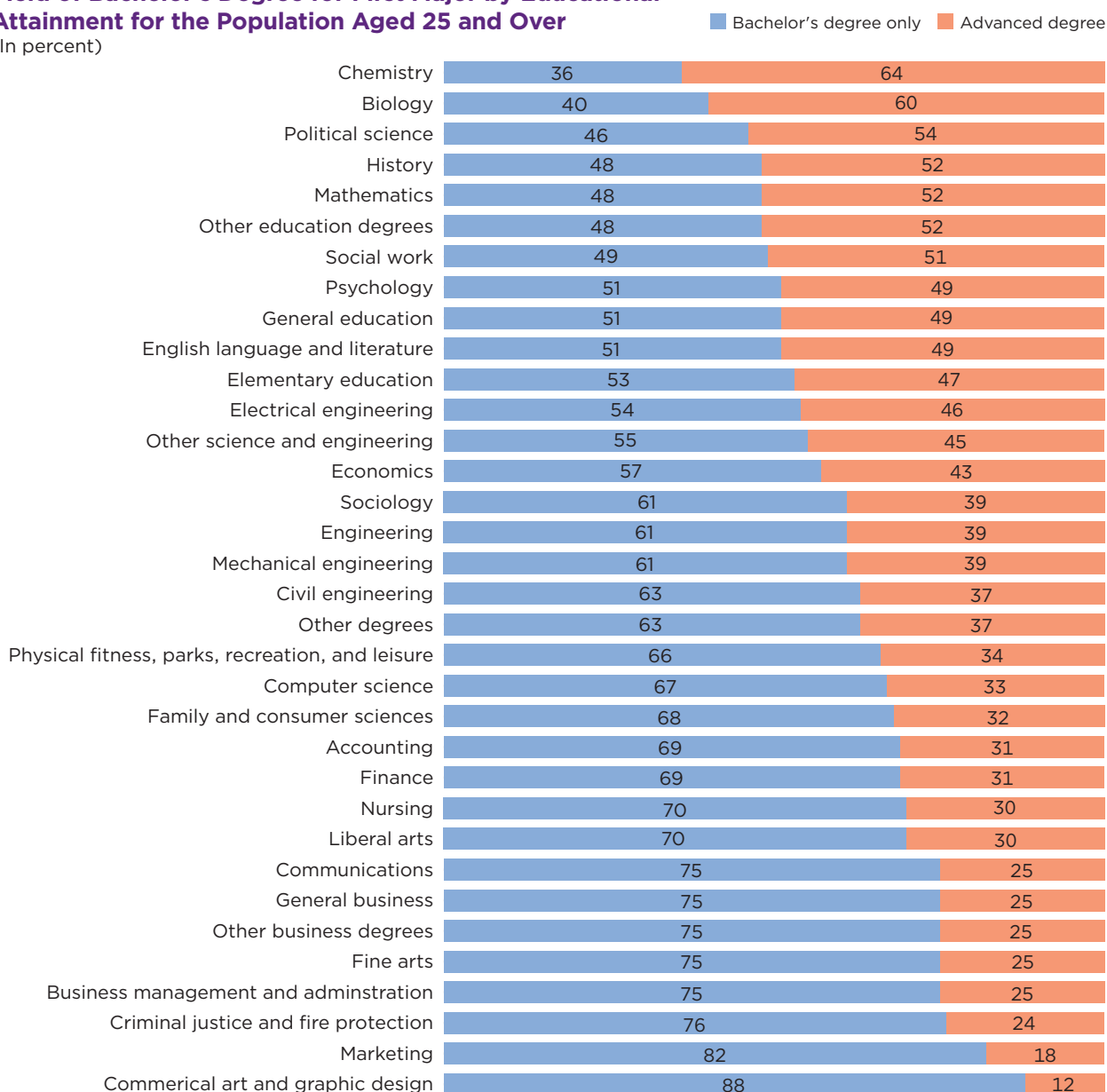
¹ Science- and engineering-related fields are included within the "Other science and engineering" degrees category.

Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates, <www.census.gov/acs>.

Figure 2.

Field of Bachelor's Degree for First Major by Educational Attainment for the Population Aged 25 and Over

(In percent)



Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates, <www.census.gov/acs/>.

The remaining occupation groups had rates under 10 percent and include service occupations (5.9 percent); production, transportation, and material moving occupations (3.5 percent); and natural resources, construction, and maintenance occupations (1.7 percent).

Table 7 details the most common occupation group for each field of degree along with the share of degree earners employed in that occupation group and the median earnings for those individuals. The share of degree holders in all other occupation groups and the median earning of those individuals are listed for comparison in the last two columns. Examining modal

occupation group by field of degree gives a sense of a common pathway that many degree holders take.¹³ Some degrees might be more linked to occupation groups than others, potentially tying the median degree earnings more tightly to the median occupation earnings.

¹³ Modal refers to the most common group of occupations.

Table 6.

Median Annual Earnings by Field of Bachelor's Degree for First Major and Educational Attainment: 2022

Population aged 25 to 64 with a bachelor's degree or higher with earnings	Total population		Bachelor's degree only		Advanced degree		Bachelor's degree only earnings as a percentage of advanced degree	
	Earnings	Margin of error (±)	Earnings	Margin of error (±)	Earnings	Margin of error (±)	Estimate	Margin of error (±)
Total.	74,150	166	66,410	202	86,120	247	77.1	0.3
Science and Engineering Degrees								
Computer science	108,500	1,597	101,600	867	128,800	1,962	78.9	1.4
Engineering.	100,600	1,031	90,490	2,213	116,100	3,302	77.9	2.9
Civil engineering	99,660	1,702	94,370	1,695	107,500	2,570	87.8	2.6
Electrical engineering	121,600	1,239	106,600	1,062	139,400	2,337	76.5	1.5
Mechanical engineering	106,200	957	99,180	1,800	124,900	1,800	79.4	1.8
Mathematics	86,560	1,476	76,350	1,817	96,530	2,155	79.1	2.6
Biology.	81,550	707	60,390	983	102,800	1,448	58.7	1.3
Chemistry	94,680	2,114	71,060	2,374	109,100	3,292	65.1	2.9
Psychology	62,270	488	52,460	579	72,490	781	72.4	1.1
Economics.	101,400	916	89,570	2,396	122,100	2,864	73.4	2.6
Political science	86,380	1,325	72,420	1,853	102,700	1,578	70.5	2.1
Sociology	63,660	837	56,700	1,498	75,620	1,429	75.0	2.4
Nursing	79,600	813	73,560	546	99,060	1,905	74.3	1.5
Other science and engineering ¹	77,910	460	68,510	640	91,410	477	74.9	0.8
Business Degrees								
General business	80,120	711	74,570	820	96,280	1,719	77.5	1.6
Accounting	84,880	1,051	77,200	1,138	102,000	1,085	75.7	1.4
Business management and administration	75,600	581	71,220	659	90,840	1,341	78.4	1.4
Marketing	75,930	799	73,440	991	88,750	2,792	82.7	2.8
Finance	99,900	1,779	91,400	1,259	116,100	3,312	78.7	2.5
Other business	77,160	882	72,540	1,113	92,260	1,993	78.6	2.1
Education Degrees								
General education	58,000	731	50,490	473	66,880	895	75.5	1.2
Elementary education	54,900	550	47,320	621	65,170	706	72.6	1.2
Other education	58,120	478	49,600	621	67,460	645	73.5	1.2
Arts, Humanities, and Other Degrees								
Communications	67,840	1,017	64,760	671	76,560	1,216	84.6	1.6
English language and literature	65,060	927	56,180	1,198	75,370	1,186	74.5	2.0
Liberal arts	61,380	1,044	54,560	1,350	77,310	2,048	70.6	2.6
History	73,560	1,006	62,340	1,188	85,160	1,574	73.2	1.9
Fine arts.	53,450	1,303	50,730	1,061	63,200	2,194	80.3	3.3
Commerical art and graphic design	59,770	1,049	58,490	1,161	69,310	4,029	84.4	5.2
Family and consumer sciences	52,850	952	46,770	1,477	63,800	1,587	73.3	2.9
Physical fitness, parks, recreation, and leisure.	61,580	691	55,020	1,241	73,180	1,337	75.2	2.2
Criminal justice and fire protection	64,690	809	61,830	716	76,740	1,556	80.6	1.9
Social work	55,060	838	46,700	1,233	62,510	1,025	74.7	2.3
Other degrees	62,100	420	57,340	786	71,220	917	80.5	1.5

¹ Science- and engineering-related fields are included within the "Other science and engineering" degrees category.

Note: We are unable to determine in what field respondents pursue an advanced degree. The field of degree question on the American Community Survey asks about bachelor's degree.

Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates, <www.census.gov/acs>.

First, there were several common occupations across science and engineering degrees, with a wide variation in occupation concentration rates. The modal occupation category for computer science, engineering (general, civil, electrical, and mechanical), and chemistry degree holders was computer, engineering, and science occupations. Despite sharing the same modal occupation group, the rate of degree holders in this occupation group ranged from 26.9 to 54.6 percent. Other modal occupation groups for science and engineering degrees were management, business, and financial occupations (most common for economics and other science and engineering degrees); education, legal, community service, arts, and media occupations (sociology, mathematics, psychology, and political science degrees); and healthcare practitioner and technical occupations (nursing and biology degrees). Among the detailed science and engineering fields, nursing had the highest concentration rate of degree holders within an occupation group at 75.3 percent, and the lowest was mathematics at 26.7 percent.

For all science and engineering degrees, earnings in the modal occupation category were significantly different from earnings in all other occupations. Among fields in which the most common occupation group was computer, engineering and science occupations, median annual earnings were significantly higher (between \$6,210 and \$32,620 higher) than in all other occupations, apart from mechanical engineering. The most common occupation group for both biology and nursing was healthcare practitioner and

technical occupations, and degree holders in these areas earned significantly more than those in all other occupations.

Business degrees had more uniformity in their occupations than science and engineering degrees, as the most common group for all of them was management, business, and financial occupations. Among business degree holders, the rate working in this occupation group ranged from 65.0 percent in accounting to 41.3 percent in general business. Further, business degree holders working in the modal occupation group had significantly higher median annual earnings (between \$28,590 and \$39,660) than those in all other occupations.

Like business degrees, education degrees had the same modal occupation group of education, legal, community service, arts, and media occupations. Concentration within this occupation group varied from 59.6 to 68.9 percent of degree holders across education degrees. However, in contrast to business degrees, median annual earnings for the degrees of general education and other education were roughly \$3,000 lower for those in the most common occupation group than all other occupations.¹⁴

The education, legal, community service, arts, and media occupation group was also the most common occupation group for nearly all arts, humanities, and other degrees. The exceptions were communications degrees and physical fitness, parks, recreation, and leisure degrees, for which the most common occupation groups were management, business, and

financial occupations, and criminal justice and fire protection degrees, for which the most common occupation group was service occupations. The concentration within the most common occupation group spanned from 23.5 percent (physical fitness, parks, recreation, and leisure) to 48.8 percent (social work). While there was no consistent pattern in the median annual earnings differences between the modal occupation group and all others for this group of degrees, these differences were significant for all fields of degree other than social work.

FIELD OF DEGREE BY STATE

This section of the report uses a collapsed version of the field of degree classification with five categories: science and engineering; science- and engineering-related fields; business; education; and arts, humanities, and other degrees to explore rates and earnings of field of degree for first major by state of residence. Figures 3A–3E detail the percentage of bachelor's degree holders aged 25 and over who hold degrees within each respective field of degree group by state. Each state is classified as having a rate of degree attainment higher than the national average, below the national average, or not statistically different from national average for each of the degree categories. For context, nationally, 35.9 percent of people aged 25 and over with a bachelor's degree or higher had a science and engineering degree, 9.9 percent had a degree in a science- and engineering-related field, 20.2 percent had a business degree, 11.1 percent had an education degree, and 23.0 percent had a degree in the arts, humanities, or other in 2022.

¹⁴ Median annual earnings for elementary education degree holders were not statistically different between the two occupation groups.

Table 7.

Median Annual Earnings by Field of Degree and Occupation Group: 2022

Population aged 25 to 64 with a bachelor's degree or higher with earnings	Most common occupation group	Percent	Earnings	All other occupations	
				Percent	Earnings
Science and Engineering Degrees					
Computer science	Computer, engineering, and science	54.6	122,000	45.4	89,380
Engineering	Computer, engineering, and science	38.0	109,200	62.0	88,650
Civil engineering	Computer, engineering, and science	48.4	101,400	51.6	95,190
Electrical engineering	Computer, engineering, and science	52.1	126,300	47.9	109,100
Mechanical engineering	Computer, engineering, and science	48.2	105,700	51.8	107,200
Mathematics	Education, legal, community service, arts, and media	26.7	64,950	73.3	100,600
Biology	Healthcare practitioner and technical	36.8	115,000	63.2	69,460
Chemistry	Computer, engineering, and science	26.9	100,700	73.1	91,210
Psychology	Education, legal, community service, arts, and media	30.0	56,490	70.0	65,480
Economics	Management, business, and financial	45.3	122,700	54.7	84,340
Political science	Education, legal, community service, arts, and media	33.4	90,140	66.6	85,010
Sociology	Education, legal, community service, arts, and media	29.5	60,170	70.5	65,940
Nursing	Healthcare practitioner and technical	75.3	81,840	24.7	63,110
Other science and engineering	Management, business, and financial	24.0	99,010	76.0	72,350
Business Degrees					
General business	Management, business, and financial	41.3	100,100	58.7	65,110
Accounting	Management, business, and financial	65.0	97,680	35.0	58,020
Business management and administration	Management, business, and financial	44.1	93,400	55.9	61,310
Marketing	Management, business, and financial	42.8	91,930	57.2	63,340
Finance	Management, business, and financial	55.4	111,500	44.6	77,280
Other business	Management, business, and financial	43.7	93,610	56.3	63,580
Education Degrees					
General education	Education, legal, community service, arts, and media	59.6	57,230	40.4	60,560
Elementary education	Education, legal, community service, arts, and media	68.9	55,030	31.1	54,320
Other education	Education, legal, community service, arts, and media	59.8	57,430	40.2	60,150
Arts, Humanities, and Other Degrees					
Communications	Management, business, and financial	35.6	85,190	64.4	59,840
English language and literature	Education, legal, community service, arts, and media	39.7	62,000	60.3	68,430
Liberal arts	Education, legal, community service, arts, and media	29.4	59,000	70.6	62,640
History	Education, legal, community service, arts, and media	35.9	70,300	64.1	75,680
Fine arts	Education, legal, community service, arts, and media	36.7	51,450	63.3	55,050
Commerical art and graphic design	Education, legal, community service, arts, and media	39.7	58,720	60.3	60,640
Family and consumer sciences	Education, legal, community service, arts, and media	37.7	48,760	62.3	55,170
Physical fitness, parks, recreation, and leisure	Management, business, and financial	23.5	74,880	76.5	57,610
Criminal justice and fire protection	Service	27.1	73,130	72.9	62,020
Social work	Education, legal, community service, arts, and media	48.8	54,850	51.2	55,370
Other degrees	Education, legal, community service, arts, and media	32.8	55,610	67.2	65,580

Note: Margins of error are available in Table A-4.

Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates, <www.census.gov/acs>.

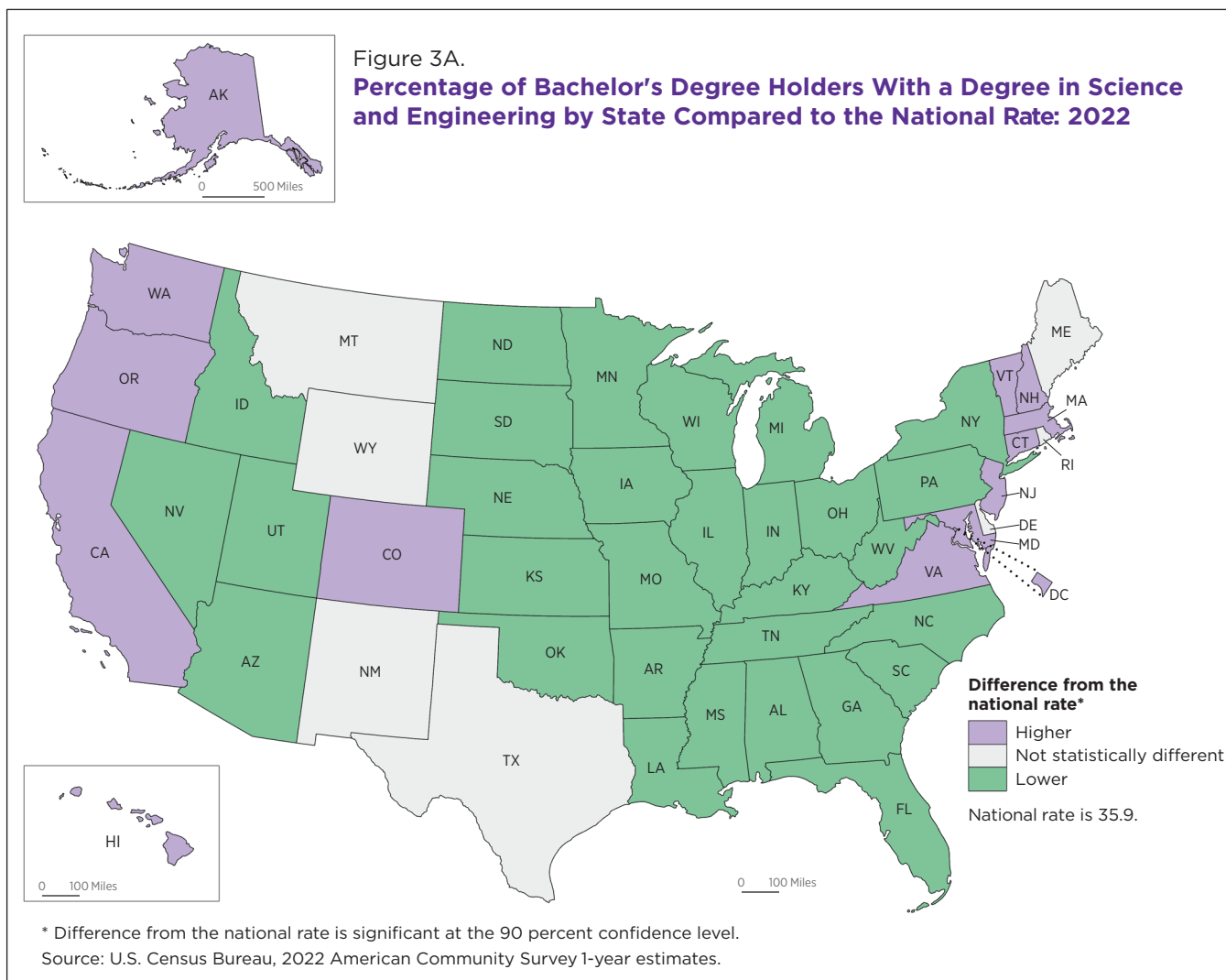


Figure 3A presents the percentage of bachelor's degree holders with a science and engineering degree by state. States that had greater than average science and engineering degree attainment rates were along the West Coast, in states in the Northeast, and the greater Washington, DC, area (Maryland and Virginia). Figure 3B presents the rate of degrees in science- and engineering-related fields by state. The Midwest had several states with rates higher than the national average, while the West Coast and parts of the Northeast had lower rates. Figure 3C presents the percentage of bachelor's degree holders with a business degree by state. Business degree attainment

was higher than average in the southern United States and lower rates in the Northeast and West Coast.

Figure 3D presents the percentage of bachelor's degree holders with an education degree. Thirty-two states had rates of education degrees that were higher than the national average, and many of them were concentrated in the Midwest. Figure 3E presents the percentage of bachelor's degree holders with a degree in the arts, humanities, or other areas. States in New England had rates higher than the national average, while there were groups of states in

the Midwest and South with rates lower than the national average.

Median annual earnings also varied by field of degree across states. Table 8 presents median annual earnings for the population aged 25 to 64 (with earnings) by field of degree and state of residence. Nationally, median annual earnings were highest for science and engineering degrees (\$84,930), followed by business (\$80,570), science- and engineering-related fields (\$75,850), arts, humanities, and other degrees (\$62,740), and education (\$57,090), but these varied substantially across states. Earnings for science and engineering degrees ranged



Figure 3B.
Percentage of Bachelor's Degree Holders With a Degree in a Science- and Engineering-Related Field by State Compared to the National Rate: 2022

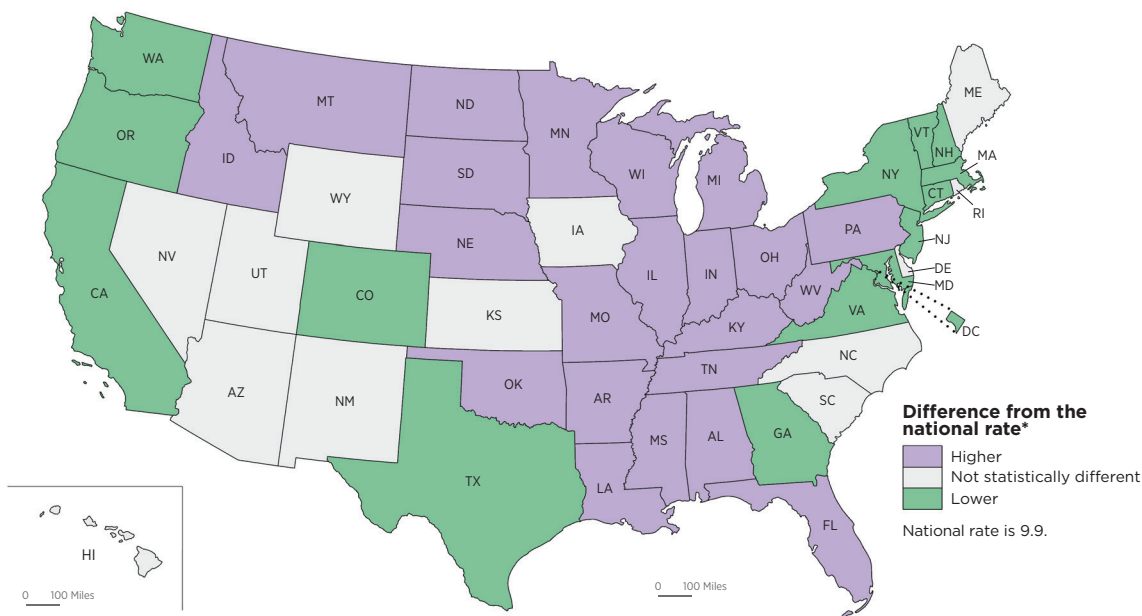
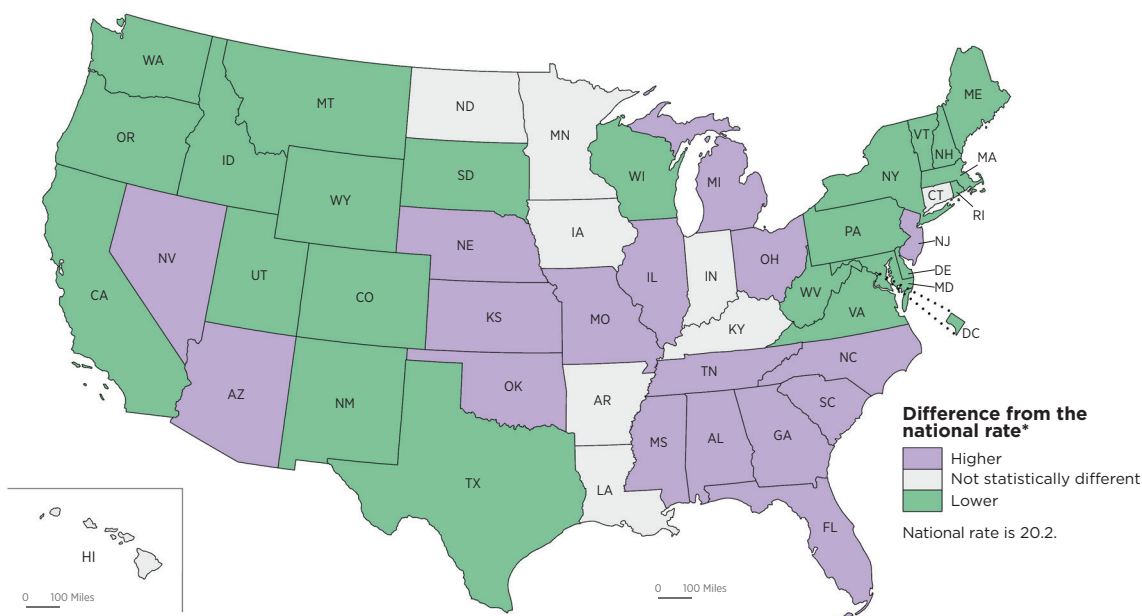


Figure 3C.
Percentage of Bachelor's Degree Holders With a Business Degree by State Compared to the National Rate: 2022



* Difference from the national rate is significant at the 90 percent confidence level.
 Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates.



Figure 3D.
Percentage of Bachelor's Degree Holders With an Education Degree by State Compared to the National Rate: 2022

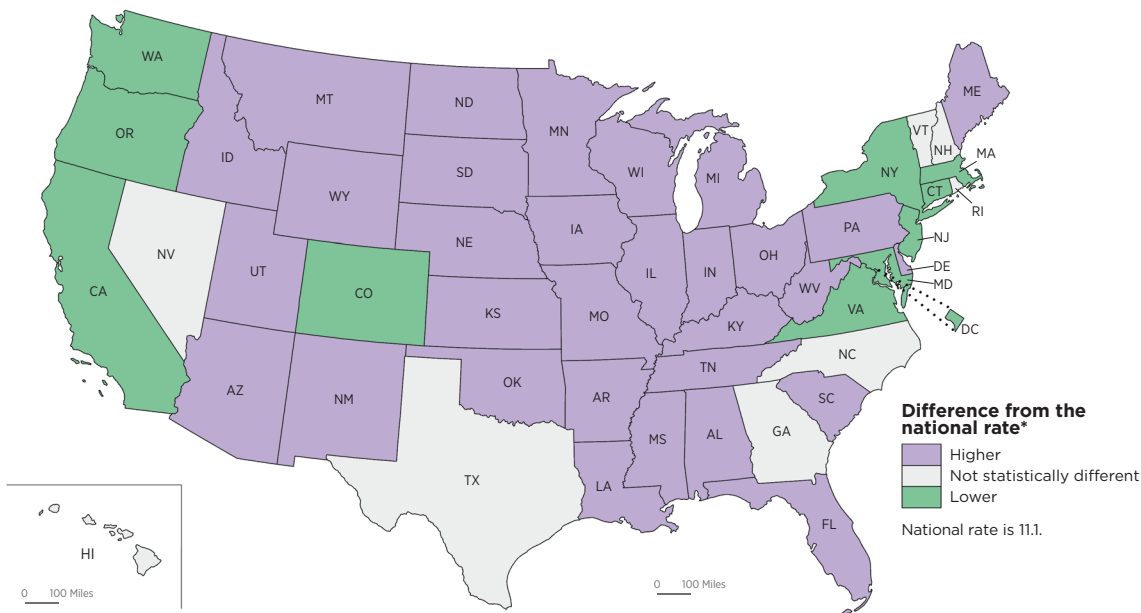
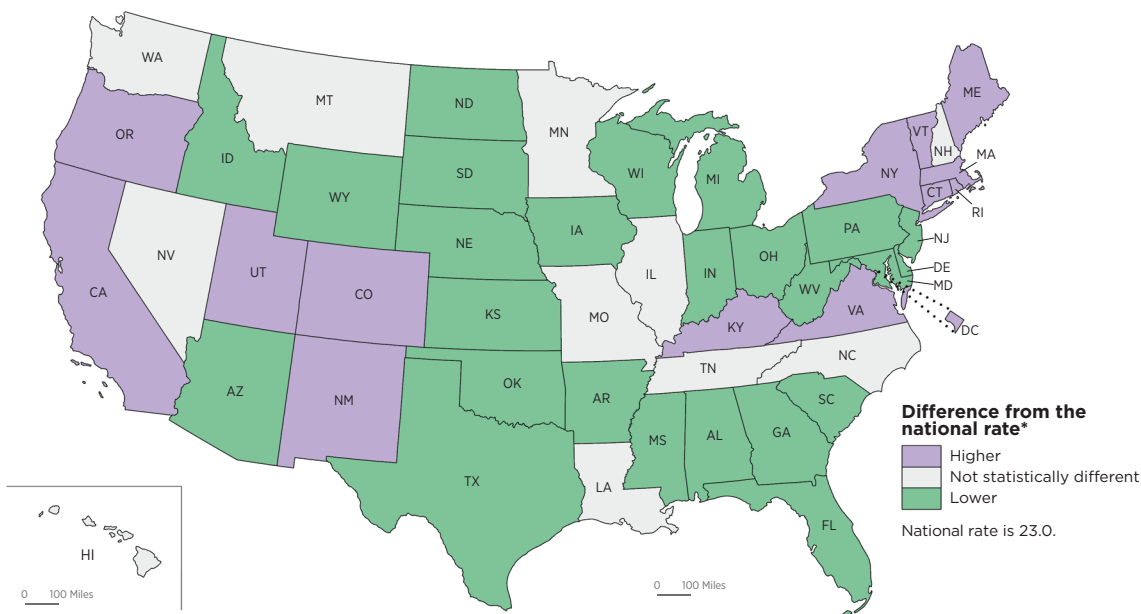


Figure 3E.
Percentage of Bachelor's Degree Holders With a Degree in Art, Humanities, or Other Field by State Compared to the National Rate: 2022



* Difference from the national rate is significant at the 90 percent confidence level.
Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates.

from \$105,300 in the District of Columbia to \$60,390 in Mississippi. There were 12 states where median annual earnings were the highest for science and engineering degree holders among the field of degree groups in Table 8, including New York, Virginia, and Washington. Median annual earnings for science- and engineering-related fields were the highest in California (\$92,860) and the lowest in North Dakota (\$61,500). Earnings for business degree holders ranged from \$110,400 in the District of Columbia to \$60,760 in Mississippi. Iowa was the lone state where business degree holders had the highest median annual earnings of the FOD groups in Table 8.¹⁵

FIELD OF DEGREE BY METROPOLITAN AREA

Previous reports from the Census Bureau explained that bachelor's degree attainment is higher in metropolitan areas than it is outside of them.¹⁶ Metropolitan areas can serve as discrete labor markets that may draw specific fields of degrees to the area. Figure 4 details the percentage of each field of degree group across the 30 largest metropolitan statistical areas (MSAs) in the country in 2022.

The rate of science and engineering majors varied widely across MSAs, from 44.3 percent of bachelor's degree holders in San Francisco to 25.3 percent

in Orlando.¹⁷ These field of degree groups do obscure some interesting variation in fields of degrees across metro areas, as the science and engineering group includes everything from the social sciences to engineering. For example, political science is the most common major in the greater Washington, DC, MSA (5.8 percent of bachelor's degree holders), and Washington, DC, has a higher rate of political science degree holders than all other MSAs (Figure 4).¹⁸

Figure 4 presents other variations in field of degree groups as well. The rate of business degree holders ranged from 31.3 percent in Miami to 17.7 percent in Portland. The rates of science- and engineering-related fields ranged from 13.7 percent (in Cincinnati and Tampa) to 6.9 percent in Washington, DC. The education field of degree group was generally the smallest field of degree group across MSAs, spanning 10.7 percent of bachelor's degree holders in St. Louis to 3.1 percent in San Francisco. Lastly, arts, humanities, and other degrees varied, with the highest rate in Los Angeles (32.8 percent) and the lowest rate in Houston (20.2 percent).

In addition to the rates of field of degree, earnings also varied across MSAs. Table 9 details median annual earnings for the population aged 25 to 64 by field of degree and educational attainment across MSAs. Bachelor's degree

attainment ranged from 24.1 percent in Riverside to 54.5 percent in Washington, DC. Earnings also fluctuated for bachelor's degree holders across MSAs, from \$114,800 in San Francisco to \$61,460 in Orlando.

For science and engineering majors, earnings were also the highest in San Francisco (at \$121,800) and the lowest in Miami (\$65,740). Earnings for science- and engineering-related fields were the lowest in Orlando (\$65,960) and highest in Sacramento (\$95,750) and San Francisco (\$104,500). Median annual earnings for business degree holders were over \$90,000 in San Francisco (\$119,700); Washington, DC, (\$102,800); Seattle (\$95,570); Boston (\$94,490); and New York City (\$92,770). Some of the lower earnings for business degree holders were in Orlando (\$65,610) and Las Vegas (\$64,910). For arts, humanities, and other degrees, earnings were again the highest in San Francisco (\$92,240). Seven MSAs had median annual earnings less than \$65,000: Orlando (\$52,940), Tampa (\$56,800), San Antonio (\$58,990), Charlotte (\$59,060), Miami (\$59,440), Cincinnati (\$59,860), and St. Louis (\$60,270).

Table 9 and Figure 4 indicate that metropolitan areas have substantially different compositions when it comes to specific fields of degree and their respective median earnings. These differences could be based on a variety of factors, from labor market demands to specific industry needs, cost of living, or even the spatial layout of a given MSA.

¹⁵ There were 18 states where business degree holders had the highest median earnings of any group, but Iowa was the only state where the differences were statistically significant.

¹⁶ For more information, refer to <www.census.gov/content/dam/Census/library/publications/2021/acs/acsbr-009.pdf>.

¹⁷ For brevity, MSAs are referred to in text only by their principal city identifier. Full MSA names are used in corresponding tables.

¹⁸ For a more detailed breakdown of field of degree by MSA, refer to Table 6 in "2022 American Community Survey Detailed Field of Degree and Median Annual Earnings Table Package" at <www.census.gov/data/tables/2022/demo/educational-attainment/acs-detailed-tables.html>.

Table 8.

Median Annual Earnings by Field of Bachelor's Degree for First Major and State: 2022

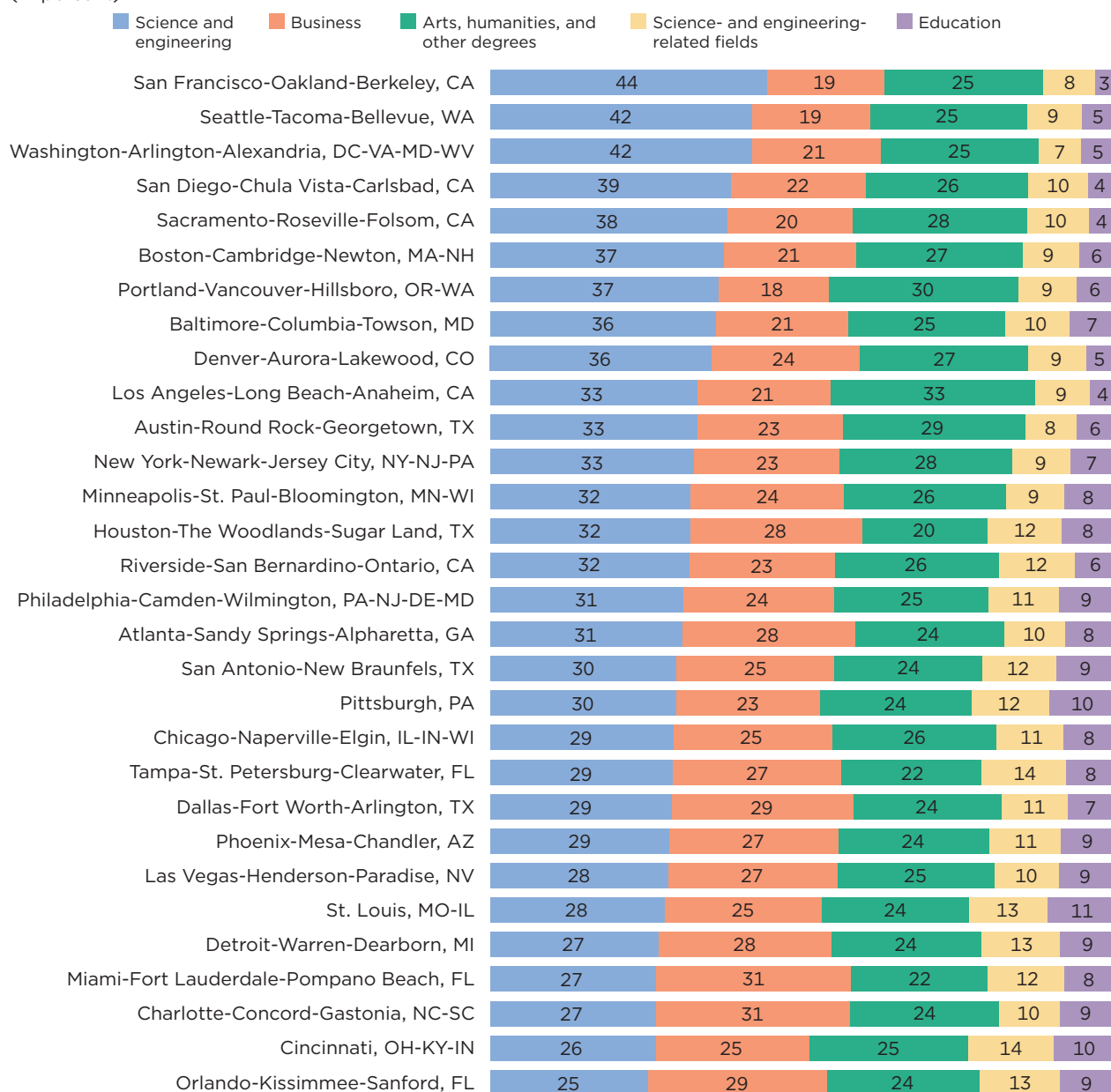
Population aged 25 to 64 with a bachelor's degree or higher with earnings	Science and engineering		Science- and engineering-related fields		Business		Education		Arts, humanities, and other	
	Earnings	Margin of error (±)	Earnings	Margin of error (±)	Earnings	Margin of error (±)	Earnings	Margin of error (±)	Earnings	Margin of error (±)
Total	84,930	299	75,850	373	80,570	270	57,090	348	62,740	255
Alabama	76,220	2,047	68,780	3,166	68,180	3,877	51,900	1,556	53,000	1,432
Alaska	83,530	5,981	72,910	10,130	90,330	12,510	72,890	5,221	69,000	7,756
Arizona	80,290	2,247	73,200	3,323	77,310	3,173	53,110	1,254	61,120	1,157
Arkansas	69,740	3,425	69,080	4,950	71,110	5,064	51,000	1,543	49,910	2,405
California	101,500	503	92,860	1,585	88,130	2,154	66,430	3,030	72,720	982
Colorado	84,060	1,865	75,610	2,852	86,490	1,833	54,740	1,962	64,130	1,859
Connecticut	93,100	2,313	82,070	2,882	93,650	3,699	73,480	3,136	71,310	2,075
Delaware	79,740	4,967	76,850	5,442	78,260	8,025	64,460	4,320	61,240	4,161
District of Columbia . .	105,300	4,168	88,110	5,987	110,400	11,860	76,190	15,360	92,820	4,176
Florida	70,760	1,370	68,270	2,371	69,300	1,822	51,420	579	55,260	1,028
Georgia	80,330	1,445	72,590	2,528	79,000	2,217	58,550	1,811	61,870	1,229
Hawaii	77,090	2,663	83,140	5,738	68,090	5,154	61,380	2,889	61,010	4,298
Idaho	70,650	4,025	61,690	3,684	76,330	6,050	51,940	2,993	51,720	2,246
Illinois	84,600	1,425	74,930	1,436	86,040	1,489	61,200	1,155	65,550	1,504
Indiana	74,720	2,115	72,390	1,896	73,610	2,185	51,580	1,024	52,680	1,429
Iowa	72,670	2,088	69,470	2,534	75,860	1,761	56,070	1,815	54,110	1,438
Kansas	74,560	2,748	69,610	3,179	73,110	3,401	52,380	1,110	56,150	1,972
Kentucky	72,010	2,881	70,470	2,525	69,900	3,793	52,210	1,404	52,350	1,769
Louisiana	71,450	3,416	68,680	2,916	67,260	3,700	51,100	1,022	52,800	1,686
Maine	63,610	1,887	66,670	6,246	72,950	4,630	53,690	4,170	56,370	4,437
Maryland	99,690	2,307	83,640	1,917	94,220	2,322	70,420	2,468	74,140	1,691
Massachusetts	97,470	1,879	86,890	3,394	92,170	1,963	71,280	2,668	73,200	1,166
Michigan	84,240	1,312	72,910	2,260	76,340	1,253	57,730	1,847	58,420	1,286
Minnesota	83,470	1,598	75,510	1,753	85,760	2,158	59,560	2,351	63,600	1,655
Mississippi	60,390	3,004	63,400	4,680	60,760	3,202	43,950	2,231	49,220	2,389
Missouri	72,650	2,318	70,920	2,455	74,070	2,234	49,880	1,229	54,990	1,517
Montana	64,790	3,305	66,230	6,923	62,430	3,089	49,110	2,554	50,890	2,319
Nebraska	73,130	3,287	70,970	3,318	75,650	4,146	55,160	1,876	55,590	2,113
Nevada	73,030	2,426	75,640	3,966	68,250	3,801	56,130	3,395	61,570	2,862
New Hampshire	86,810	3,346	76,860	6,721	82,670	2,728	62,300	3,290	64,540	2,697
New Jersey	98,140	2,145	89,370	2,886	94,190	2,717	68,170	2,743	73,480	1,450
New Mexico	72,850	3,394	73,920	6,097	74,910	7,153	54,430	2,907	54,480	3,294
New York	86,490	1,006	82,570	1,456	84,460	1,703	70,960	1,494	70,790	1,236
North Carolina	78,780	1,830	70,840	2,694	74,180	2,257	50,950	1,044	56,260	1,400
North Dakota	67,790	3,679	61,500	3,806	64,480	3,835	55,780	4,535	57,580	4,594
Ohio	80,570	1,333	72,640	1,440	78,070	1,979	61,470	1,185	58,070	1,344
Oklahoma	68,720	2,769	66,470	3,286	68,450	3,480	48,280	878	51,880	1,028
Oregon	81,690	1,985	81,240	3,795	79,180	3,864	60,210	7,319	60,240	2,466
Pennsylvania	81,530	1,147	76,460	1,545	79,720	1,871	63,520	1,049	61,900	737
Rhode Island	82,270	4,176	80,130	10,990	87,610	7,827	67,410	6,537	64,230	3,005
South Carolina	70,160	2,603	71,220	4,263	67,450	3,045	50,660	1,774	54,830	1,791
South Dakota	62,790	2,651	66,960	4,233	67,290	6,378	50,500	1,700	50,060	2,434
Tennessee	71,960	1,904	66,350	2,841	71,280	2,261	51,250	1,325	55,280	1,404
Texas	82,250	1,067	75,880	1,421	79,800	1,633	58,610	720	61,800	790
Utah	83,580	3,275	65,510	3,820	84,720	3,239	54,970	2,134	57,090	2,311
Vermont	69,410	2,854	68,340	6,124	63,400	5,903	57,040	5,123	56,460	2,807
Virginia	97,550	2,038	78,770	1,893	91,940	1,986	58,310	1,694	72,610	1,577
Washington	102,900	1,353	82,750	2,279	89,140	3,253	69,920	3,299	69,870	2,485
West Virginia	67,730	5,559	64,330	4,455	66,360	6,664	48,990	1,970	51,780	2,756
Wisconsin	76,230	1,553	71,740	1,578	75,940	1,751	54,280	1,113	59,040	1,601
Wyoming	68,920	4,620	68,200	5,186	73,480	14,220	57,610	5,445	50,270	4,213

Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates, <www.census.gov/acs>.

Figure 4.

Field of Degree Group by Metropolitan Statistical Area for the Population Aged 25 and Over: 2022

(In percent)



Note: Field of degree percentages only include people with a bachelor's degree or higher.

Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates, <www.census.gov/acs>.

SUMMARY

This report explained trends by select characteristics and median annual earnings by field of bachelor's degree in the United States in 2022. In 2022, 35.7 percent of people aged

25 and over had a bachelor's degree, up from 27.2 percent in 2005. As more individuals obtain bachelor's degrees, analyses of field of degree data allow for an understanding of the varying economic returns to a college

degree. For example, median annual earnings across the fields of degree ranged from \$52,850 for family and consumer sciences to \$121,600 for electrical engineering degree earners.

This report identified that demographic characteristics vary across fields of bachelor's degrees. Notable differences were evident across age groups, with people aged 65 and over holding education degrees at considerably higher rates than younger adults. Moreover, the composition of each field of degree varied by sex, with some fields being disproportionately held by men (e.g., computer science and finance degrees) and some degrees being disproportionately held by women (e.g., nursing and education degrees). Across all fields of degree examined in this report, men earned more than women with the same field of degree. Future research should examine the relationship between the demographic characteristics of a specific field of degree and the relative earnings in greater detail.

Beyond differences by sex, representation in and median earnings for fields of degree differed by race and Hispanic origin. The racial composition of each field of degree varied, with some fields of degree having greater (or lower) representation than their respective share of the population of bachelor's degree holders. Elementary education (81.4 percent) had the highest rate for the White alone population, followed by social work (16.2 percent) for the Black alone population, electrical engineering (29.3 percent) for the Asian alone population, psychology (5 percent) for the Some Other Race or Multiracial population, and criminal justice and fire protection (14.3 percent) for the Hispanic or Latino population (of any race).

Generally, people who were White alone or Asian alone had higher median annual earnings than those who were Black alone or Hispanic (of any race).¹⁹

This report did not disentangle why differences in earnings exist across sex, race, and Hispanic origin for people with the same field of degree. However, results from Table 7 explained that earnings vary by occupation within fields of degree. Some results suggested that people with occupations more closely related to their field of degree, like healthcare occupations for nursing degree holders or computer, engineering, and science occupations for people with fields of degree in engineering, had higher earnings than those in other occupations. Occupational choices may vary by sex, race, and Hispanic origin in ways not examined in this report. These earnings differences may also be shaped by differences in advanced degree attainment, employment status, type of college attended, and geographic location.

The final section of the report examined fields of degree and their respective earnings by geography, focusing on states and metropolitan statistical areas. At the state level, states on the West Coast and Northeast

had higher rates of science and engineering majors than the national average. Earnings also varied by state, as the District of Columbia, Washington, and California all had median annual earnings over \$100,000 for science and engineering majors, while South Dakota and Mississippi had earnings less than \$65,000. Across MSAs, there was variation by field of degree, as over 30 percent of bachelor's degree holders in Charlotte and Miami had business degrees, compared to 17.7 percent in Portland, for example. Earnings also varied by MSA, ranging from \$114,800 in San Francisco to less than \$70,000 in Las Vegas, Miami, and Orlando. These results highlight how variation in local labor markets and cost of living likely affect the rate and earnings of fields of degree.

In summary, this report identified some of the demographic and economic differences within and between fields of degree in the United States in 2022. This is the first Census Bureau report to use detailed fields of degree rather than broad field of degree groups. Understanding earnings and field of degree expands our knowledge of labor markets and persistent inequalities by both sex and race. A better understanding of the economic returns to discrete fields of degree can help degree seekers make informed choices about what degree to pursue as well as provide policymakers with useful data in assessing the differential effects of student loan debt in the United States. Overall, these results have implications for the study of education, labor markets, and social stratification.

¹⁹ White alone earnings were significantly higher than Black alone earnings in 32 of 34 fields of degree in Table 7. White alone earnings were higher than Hispanic (of any race) earnings in 33 of 34 fields of degree in Table 7. Asian alone earnings were higher than Black alone earnings in 31 of 34 fields of degree in Table 7. Asian alone earnings were higher than Hispanic (of any race) earnings in 31 of 34 fields of degree in Table 7.

Table 9.

Median Annual Earnings by Field of Bachelor's Degree for First Major and Select Metropolitan Statistical Areas: 2022

Population aged 25 to 64 with earnings and a bachelor's degree or higher	Total population	Educational attainment				Science and engineering	Science- and engineering-related fields	Business	Education	Arts, humanities, and other degrees
		Less than a bachelor's degree		All bachelor's degree holders						
		Percent	Earnings	Percent	Earnings					
Total	138,700,000	58.9	40,540	41.1	74,150	84,930	75,850	80,570	57,090	62,740
Atlanta-Sandy Springs-Alpharetta, GA	4,191,000	58.2	40,740	41.8	76,770	80,030	77,450	83,710	59,440	65,650
Austin-Round Rock-Georgetown, TX	1,665,000	47.9	44,190	52.1	81,100	84,610	77,410	91,170	55,710	65,510
Baltimore-Columbia-Towson, MD	1,977,000	55.6	45,110	44.4	84,330	90,360	82,770	91,680	71,170	71,320
Boston-Cambridge-Newton, MA-NH	3,474,000	48.6	46,460	51.4	90,870	95,020	90,970	94,490	72,420	76,720
Charlotte-Concord-Gastonia, NC-SC	1,886,000	59.3	40,430	40.7	74,000	79,350	76,890	86,150	52,540	59,060
Chicago-Naperville-Elgin, IL-IN-WI	6,530,000	58.9	41,670	41.1	79,740	81,660	77,470	88,480	63,160	68,200
Cincinnati, OH-KY-IN	1,542,000	63.1	41,460	36.9	74,090	74,790	74,850	84,020	60,200	59,860
Dallas-Fort Worth-Arlington, TX	5,213,000	60.6	41,020	39.4	78,670	80,710	76,120	88,600	61,120	65,870
Denver-Aurora-Lakewood, CO	2,117,000	50.6	47,140	49.4	82,210	82,840	75,960	92,250	60,010	70,330
Detroit-Warren-Dearborn, MI	3,053,000	65.5	40,230	34.5	79,120	78,790	77,870	82,750	58,900	60,960
Houston-The Woodlands-Sugar Land, TX	4,761,000	64.0	39,340	36.0	75,690	74,730	81,230	80,320	61,060	62,790
Las Vegas-Henderson-Paradise, NV	1,612,000	72.9	39,250	27.1	64,500	70,810	79,170	64,910	56,420	60,380
Los Angeles-Long Beach-Anaheim, CA	9,050,000	62.4	37,550	37.6	81,230	84,630	86,740	84,580	64,720	69,430
Miami-Fort Lauderdale-Pompano Beach, FL	4,439,000	63.0	35,690	37.0	63,920	65,740	67,300	67,280	53,830	59,440
Minneapolis-St. Paul-Bloomington, MN-WI	2,535,000	54.9	47,410	45.1	79,530	81,300	77,090	90,510	61,090	67,020
New York-Newark-Jersey City, NY-NJ-PA	13,840,000	56.1	41,020	43.9	86,790	92,140	88,270	92,770	72,730	76,220
Orlando-Kissimmee-Sanford, FL	1,923,000	63.1	37,710	36.9	61,460	66,990	65,960	65,610	48,710	52,940
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	4,356,000	57.7	42,820	42.3	80,390	84,020	80,340	88,900	68,560	67,190
Phoenix-Mesa-Chandler, AZ	3,422,000	65.1	42,800	34.9	72,370	75,670	72,670	80,650	54,260	62,720
Pittsburgh, PA	1,717,000	61.9	42,130	38.1	71,040	70,950	74,720	72,990	64,380	60,720
Portland-Vancouver-Hillsboro, OR-WA	1,808,000	58.3	44,090	41.7	79,660	84,060	82,340	89,640	62,850	63,770
Riverside-San Bernardino-Ontario, CA	3,052,000	75.9	40,730	24.1	73,810	71,630	81,240	76,570	74,740	64,410
Sacramento-Roseville-Folsom, CA	1,661,000	63.8	43,780	36.2	84,430	84,230	95,750	86,330	69,200	71,250
San Antonio-New Braunfels, TX	1,745,000	67.3	36,640	32.7	65,300	69,180	72,350	69,800	55,360	58,990
San Diego-Chula Vista-Carlsbad, CA	2,268,000	57.0	41,990	43.0	84,380	89,010	91,440	82,510	53,630	70,930
San Francisco-Oakland-Berkeley, CA	3,364,000	46.4	45,020	53.6	114,800	121,800	104,500	119,700	71,870	92,240
Seattle-Tacoma-Bellevue, WA	2,872,000	53.1	50,940	46.9	98,000	106,500	85,440	95,570	72,240	76,080
St. Louis, MO-IL	1,961,000	61.9	41,420	38.1	72,350	76,660	73,820	83,050	55,330	60,270
Tampa-St. Petersburg-Clearwater, FL	2,396,000	65.0	38,830	35.0	67,880	74,550	72,390	76,910	51,790	56,800
Washington-Arlington-Alexandria, DC-VA-MD-WV	4,390,000	45.5	44,800	54.5	100,200	105,400	90,030	102,800	70,590	87,640

Note: Refer to Table A-5 for margins of error for these estimates. Field of degree percentages only include people with a bachelor's degree or higher.

Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates, <www.census.gov/acs>.

MORE INFORMATION

For more information about field of degree and educational attainment in the United States, refer to the Census Bureau's website on educational attainment at <www.census.gov/topics/education/educational-attainment.html>.

For more details on field of degree by earnings, refer to the detailed field of degree table package at <www.census.gov/data/tables/2022/demo/educational-attainment/acs-detailed-tables.html>.

SOURCE AND ACCURACY OF THE ESTIMATES

The data presented in this report are based on the ACS samples interviewed from January 1, 2022, through December 31, 2022. The estimates based on these samples describe the actual average values of person, household, and housing unit characteristics over these periods of collection. Sampling error is the uncertainty between an estimate based on a sample and the corresponding value that would be obtained if the estimate were based on the entire population (as from a census). Measures of sampling error are provided in the form of margins of error for all estimates included

in this report. All comparative statements in this report have undergone statistical testing, and comparisons are significant at the 90 percent confidence level. In addition to sampling error, nonsampling error may be introduced during any of the operations used to collect and process survey data, such as editing, reviewing, or keying data from questionnaires. For more information on sampling and estimation methods, confidentiality protection, and sampling and nonsampling errors, refer to the 2022 ACS 1-year Accuracy of the Data document at <https://www2.census.gov/programs-surveys/acs/tech_docs/accuracy/ACS_Accuracy_of_Data_2022.pdf>.

WHAT IS THE AMERICAN COMMUNITY SURVEY?

The American Community Survey (ACS) is a nationwide survey designed to provide communities with reliable and timely demographic, social, economic, and housing data for the nation, states, congressional districts, counties, places, and other localities every year. It has an annual sample size of about 3.5 million addresses across the United States and Puerto Rico and includes both housing units and group quarters (e.g., nursing

facilities and prisons). The ACS is conducted in every county throughout the nation, and every municipio in Puerto Rico, where it is called the Puerto Rico Community Survey. Beginning in 2006, ACS data have been released annually for geographic areas with populations of 65,000 and greater. For information on the ACS sample design and other topics, visit <www.census.gov/acs>.

CONTACT

For questions related to the contents of this report and the accompanying tables, contact the author:

Kevin McElrath
<kevin.mcelrath@census.gov>

Education and Social Stratification
Branch

Social, Economic, and Housing
Statistics Division

U.S. Census Bureau

301-763-2464

SUGGESTED CITATION

McElrath, Kevin, "Field of Bachelor's Degree in the United States: 2022," *American Community Survey Reports*, U.S. Census Bureau, Washington, DC, 2025.

Appendix Table A-1a.

Detailed Field of Degree for Other Science and Engineering Degree Codes

Label	Code	Label	Code	Label	Code	Label	Code
General agriculture	1100	Biomedical engineering	2404	Pharmacology	3607	Applied biotechnology	5101
Agriculture production and management	1101	Chemical engineering	2405	Physiology	3608	Nuclear and industrial radiology technologies	5102
Agricultural economics	1102	Computer engineering	2407	Zoology	3609	Educational psychology	5201
Animal sciences	1103	Engineering mechanics, physics, and science	2409	Epidemiology	3610	Clinical psychology	5202
Food science	1104	Environmental engineering	2410	Neuroscience	3611	Counseling psychology	5203
Plant science and agronomy	1105	Geological and geophysical engineering	2411	Miscellaneous biology	3699	Experimental psychology	5204
Soil science	1106	Industrial and manufacturing engineering	2412	Applied mathematics	3701	Industrial and organizational psychology	5205
Miscellaneous agriculture	1199	Materials engineering and materials science	2413	Statistics	3702	Social psychology	5206
Environmental science	1301	Metallurgical engineering	2415	Decision science	3705	Miscellaneous psychology	5299
Forestry	1302	Mining and mineral engineering	2416	Miscellaneous mathematics	3799	General social sciences	5500
Natural resources management	1303	Naval architecture and marine engineering	2417	Multi/Interdisciplinary studies	4000	Anthropology and archeology	5502
Architecture	1401	Nuclear engineering	2418	Intercultural and international studies	4001	Criminology	5503
Area, ethnic, and civilization studies	1501	Petroleum engineering	2419	Nutrition sciences	4002	Geography	5504
Computer and information systems-general	2100	Operations research	2420	Accounting and computer science	4004	International relations	5505
Computer programming	2101	Miscellaneous engineering	2499	Mathematics and computer science	4005	Miscellaneous social sciences	5599
Computer systems	2103	Engineering technologies	2500	Cognitive science and biopsychology	4006	General medical and health services	6100
Data processing	2104	Engineering and industrial management	2501	Interdisciplinary social sciences	4007	Communication disorders sciences and services	6102
Information sciences	2105	Electrical engineering technology	2502	Physical sciences	5000	Health and medical administrative services	6103
Computer information management and security	2106	Industrial production technologies	2503	Astronomy and astrophysics	5001	Medical assisting services	6104
Computer networking and telecommunications	2107	Mechanical engineering related technologies	2504	Atmospheric sciences and meteorology	5002	Medical technologies technicians	6105
Miscellaneous computer sciences	2199	Miscellaneous engineering technologies	2599	Geology and Earth science	5004	Health and medical preparatory programs	6106
Computer teacher education	2302	Biochemical sciences	3601	Geosciences	5005	Pharmacy, pharmaceutical sciences, and administration	6108

Appendix Table A-1a.

Detailed Field of Degree for Other Science and Engineering Degree Codes—Con.

Label	Code	Label	Code	Label	Code	Label	Code
Mathematics teacher education	2305	Botany	3602	Oceanography	5006	Treatment therapy professions	6109
Science teacher education	2308	Molecular biology	3603	Physics	5007	Community and public health	6110
Aerospace engineering	2401	Ecology	3604	Materials science	5008	Energy and biologically based therapies	6111
Biological engineering	2402	Genetics	3605	Multi-disciplinary or general science	5098	Miscellaneous health medical professions	6199
Architectural engineering	2403	Microbiology	3606	Miscellaneous physical sciences	5099	History and philosophy of science and technology	6401

Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates <www.census.gov/acs>.

Appendix Table A-1b.

Detailed Field of Degree for Other Arts, Humanities, and Other Degrees Degree Codes

Label	Code	Label	Code	Label	Code	Label	Code
Journalism	1902	Pre-law and legal studies	3202	Public policy	5402	Visual and performing arts	6003
Mass media	1903	Composition and rhetoric	3302	Human services and community organization	5403	Film, video, and photographic arts	6005
Advertising and public relations	1904	Humanities	3402	Construction services	5601	Art history and criticism	6006
Communication technologies	2001	Library science	3501	Electrical and mechanic repairs and technologies	5701	Studio arts	6007
Cosmetology services and culinary arts	2201	Military technologies	3801	Precision production	5801	Video game design and development	6008
Linguistics and comparative language and literature	2601	Philosophy and religious studies	4801	Transportation sciences and technologies	5901	Miscellaneous fine arts	6099
French, German, Latin, and other common foreign language studies	2602	Theology and religious vocations	4901	Drama and theater arts	6001	United States history	6403
Other foreign languages	2603	Public administration	5401	Music	6002		

Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates <www.census.gov/acs>.

Appendix Table A-1c.

Detailed Field of Degree for Other Field of Degree Codes

Other Business Degrees		Other Education Degrees	
Label	Code	Label	Code
Court reporting	3201	Educational administration and supervision	2301
Medical office assistance and administration	6101	School student counseling	2303
Actuarial science	6202	Physical and health education teaching	2306
Operations, logistics, and e-commerce	6204	Early childhood education	2307
Business economics	6205	Secondary teacher education	2309
Marketing research	6208	Special needs education	2310
Human resources and personnel management	6209	Social science or history teacher education	2311
International business	6210	Teacher education: multiple levels	2312
Hospitality management	6211	Language and drama education	2313
Management information systems and statistics	6212	Art and music education	2314
Miscellaneous business	6299	Miscellaneous education	2399

Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates <www.census.gov/acs>.

Appendix Table A-2.

Margins of Error for Field of First Bachelor's Degree by Age

Population aged 25 and over with a bachelor's degree or higher	25 to 34		35 to 44		45 to 54		55 to 64		65 or over	
	Margin of error (±)	Percent margin of error (±)	Margin of error (±)	Percent margin of error (±)	Margin of error (±)	Percent margin of error (±)	Margin of error (±)	Percent margin of error (±)	Margin of error (±)	Percent margin of error (±)
Total	94,180	0.1	76,450	0.1	72,530	0.1	60,210	0.1	68,070	0.1
Science and Engineering Degrees										
Computer science	14,300	0.6	14,060	0.7	11,560	0.6	8,340	0.4	5,100	0.3
Engineering	8,228	0.8	8,556	0.8	8,325	0.7	6,891	0.7	5,761	0.7
Civil engineering	7,356	0.8	7,182	0.9	6,031	0.7	6,022	0.7	6,990	0.8
Electrical engineering	9,959	0.6	10,890	0.6	9,561	0.6	8,942	0.5	8,067	0.5
Mechanical engineering	11,100	0.7	10,870	0.7	8,348	0.5	8,394	0.7	7,393	0.5
Mathematics	8,263	0.7	8,085	0.7	6,435	0.6	7,727	0.7	8,598	0.7
Biology	16,680	0.5	13,890	0.4	11,620	0.4	9,192	0.3	10,110	0.4
Chemistry	7,679	0.7	6,873	0.7	6,494	0.7	6,519	0.7	7,445	0.7
Psychology	17,410	0.4	17,390	0.4	15,760	0.3	11,300	0.3	12,190	0.3
Economics	11,590	0.7	9,332	0.5	9,271	0.5	10,130	0.6	9,345	0.5
Political science	13,180	0.6	10,820	0.5	9,944	0.5	8,107	0.5	9,062	0.5
Sociology	9,850	0.7	8,704	0.6	8,511	0.6	6,751	0.5	8,329	0.6
Nursing	17,210	0.4	16,580	0.4	17,010	0.4	12,990	0.3	14,370	0.3
Other science and engineering	41,970	0.2	31,900	0.2	28,580	0.2	24,980	0.2	24,170	0.2
Business Degrees										
General business	14,950	0.4	17,680	0.4	14,230	0.3	16,370	0.4	13,850	0.4
Accounting	15,180	0.5	15,160	0.4	12,920	0.4	13,480	0.4	9,582	0.3
Business management and administration	19,980	0.3	18,960	0.4	16,380	0.3	16,500	0.3	17,040	0.3
Marketing	12,980	0.6	14,400	0.7	10,470	0.5	9,783	0.6	7,445	0.4
Finance	12,580	0.6	11,540	0.6	8,169	0.5	8,626	0.5	5,335	0.3
Other business degrees	13,390	0.6	14,800	0.7	10,230	0.5	8,738	0.4	6,161	0.3
Education Degrees										
General education	10,860	0.3	14,510	0.4	12,920	0.4	13,600	0.4	19,650	0.5
Elementary education	9,556	0.3	9,875	0.3	12,750	0.4	10,240	0.4	16,500	0.5
Other education degrees	11,210	0.3	13,840	0.3	12,900	0.3	11,900	0.3	17,490	0.4
Arts, Humanities, and Other Degrees										
Communications	12,420	0.6	13,000	0.6	11,530	0.5	8,464	0.4	5,818	0.3
English language and literature	10,960	0.4	11,490	0.5	11,390	0.4	11,050	0.4	12,100	0.4
Liberal arts	7,368	0.7	8,434	0.8	8,306	0.8	7,733	0.8	7,830	0.7
History	10,340	0.6	11,120	0.6	8,702	0.4	8,375	0.4	9,380	0.6
Fine arts	7,980	0.7	8,153	0.7	7,523	0.7	6,218	0.6	7,480	0.8
Commerical art and graphic design	9,454	0.9	10,620	1.0	6,335	0.8	6,439	0.7	4,682	0.6
Family and consumer sciences	6,639	0.9	6,698	0.9	5,820	0.8	4,835	0.7	7,057	0.9
Physical fitness, parks, recreation, and leisure	12,170	0.9	7,725	0.7	6,323	0.6	3,876	0.4	3,556	0.4
Criminal justice and fire protection	15,620	0.8	13,120	0.7	9,701	0.6	7,529	0.5	6,639	0.4
Social work	6,960	0.7	8,445	0.9	7,042	0.8	5,080	0.6	6,416	0.7
Other degrees	23,240	0.3	22,090	0.3	18,980	0.2	18,750	0.3	16,090	0.2

Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates, <www.census.gov/acs>.

Appendix Table A-3.

Margins of Error for Field of First Bachelor's Degree by Race and Hispanic Origin

Population aged 25 and over with a bachelor's degree or higher	White alone, non-Hispanic		Black alone, non-Hispanic		Asian alone, non-Hispanic		Some Other Race or Multiracial, non-Hispanic		Hispanic (of any race)	
	Margin of error (±)	Percent margin of error (±)	Margin of error (±)	Percent margin of error (±)	Margin of error (±)	Percent margin of error (±)	Margin of error (±)	Percent margin of error (±)	Margin of error (±)	Percent margin of error (±)
Total.	174,000	0.1	55,150	0.1	38,350	Z	38,920	Z	68,370	0.1
Science and Engineering Degrees										
Computer science	14,490	0.7	9,240	0.5	13,190	0.6	5,665	0.3	7,478	0.4
Engineering	12,520	0.9	5,206	0.5	7,419	0.8	3,211	0.3	7,842	0.8
Civil engineering	12,070	0.9	3,680	0.5	5,670	0.7	3,412	0.4	5,481	0.7
Electrical engineering	13,190	0.7	5,797	0.4	11,970	0.6	3,700	0.2	7,424	0.4
Mechanical engineering	17,630	0.9	4,284	0.3	8,985	0.6	4,516	0.3	6,851	0.5
Mathematics	14,280	0.8	4,571	0.4	7,226	0.7	3,259	0.3	4,106	0.4
Biology	22,800	0.6	10,650	0.4	11,020	0.4	7,213	0.3	9,163	0.3
Chemistry	13,100	0.9	5,238	0.6	7,003	0.7	3,211	0.4	4,664	0.5
Psychology	24,640	0.4	13,070	0.3	8,452	0.2	8,997	0.2	13,530	0.3
Economics	15,880	0.6	6,279	0.4	8,174	0.4	5,146	0.3	6,819	0.4
Political science	20,890	0.7	9,755	0.5	6,545	0.4	5,137	0.3	7,095	0.4
Sociology	12,720	0.7	8,766	0.6	4,494	0.4	4,348	0.4	6,174	0.4
Nursing	26,840	0.4	12,850	0.3	11,330	0.3	6,912	0.2	12,340	0.3
Other science and engineering	55,470	0.2	22,970	0.2	25,280	0.2	13,550	0.1	25,920	0.2
Business Degrees										
General business	30,250	0.5	12,430	0.3	10,710	0.3	7,426	0.2	11,890	0.3
Accounting	21,080	0.5	10,560	0.3	10,690	0.3	5,662	0.2	9,740	0.3
Business management and administration	34,230	0.4	15,520	0.3	10,090	0.2	8,528	0.2	15,940	0.3
Marketing	19,780	0.6	7,833	0.4	4,884	0.3	4,932	0.3	7,866	0.4
Finance	18,060	0.6	8,432	0.5	7,481	0.5	4,542	0.3	6,629	0.4
Other business degrees	20,030	0.7	9,531	0.5	7,297	0.4	6,165	0.3	11,610	0.6
Education Degrees										
General education	30,890	0.5	11,080	0.4	6,873	0.2	6,361	0.2	11,210	0.3
Elementary education	27,070	0.4	6,924	0.3	4,798	0.2	4,340	0.2	6,787	0.3
Other education degrees	29,910	0.4	8,465	0.2	5,397	0.2	5,960	0.2	8,547	0.2
Arts, Humanities, and Other Degrees										
Communications	21,790	0.6	8,682	0.5	5,422	0.3	5,083	0.3	7,528	0.4
English language and literature	18,750	0.5	7,863	0.3	7,023	0.3	4,721	0.2	7,766	0.3
Liberal arts	11,930	0.9	5,251	0.5	4,807	0.5	3,956	0.4	5,558	0.5
History	21,420	0.5	4,669	0.3	4,553	0.3	4,479	0.3	4,974	0.3
Fine arts	15,230	0.9	4,994	0.5	4,465	0.5	4,034	0.4	5,929	0.6
Commerical art and graphic design	14,380	1.0	4,573	0.5	4,548	0.6	3,818	0.5	5,766	0.6
Family and consumer sciences	10,940	1.0	4,103	0.6	3,940	0.5	2,742	0.4	4,881	0.7
Physical fitness, parks, recreation, and leisure	13,690	0.8	6,309	0.6	3,336	0.3	3,723	0.4	6,031	0.6
Criminal justice and fire protection	18,080	0.7	11,110	0.6	2,922	0.2	4,771	0.3	8,936	0.5
Social work	12,520	0.8	6,772	0.8	3,561	0.4	3,693	0.4	5,445	0.6
Other degrees	42,910	0.4	16,260	0.2	11,090	0.2	10,270	0.2	15,030	0.2

Z Represents or rounds to zero.

Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates, <www.census.gov/acs>.

Appendix Table A-4.

Margins of Error for Median Annual Earnings by Field of Degree and Occupation Group

Field of degree	Most common occupation group	Percent	Earnings	All other occupations	
				Percent	Earnings
Science and Engineering Degrees					
Computer science	Computer, engineering, and science	0.7	1,281	0.7	2,281
Engineering	Computer, engineering, and science	1.0	2,835	1.0	4,429
Civil engineering	Computer, engineering, and science	1.2	1,030	1.2	2,864
Electrical engineering	Computer, engineering, and science	0.9	1,145	0.9	3,352
Mechanical engineering	Computer, engineering, and science	0.9	1,064	0.9	2,330
Mathematics	Education, legal, community service, arts, and media	0.9	2,035	0.9	2,122
Biology	Healthcare practitioner and technical	0.6	3,058	0.6	1,188
Chemistry	Computer, engineering, and science	1.0	1,877	1.0	2,280
Psychology	Education, legal, community service, arts, and media	0.5	934	0.5	875
Economics	Management, business, and financial	0.7	2,409	0.7	2,105
Political science	Education, legal, community service, arts, and media	0.7	2,737	0.7	1,569
Sociology	Education, legal, community service, arts, and media	0.8	1,208	0.8	1,703
Nursing	Healthcare practitioner and technical	0.5	439	0.5	1,521
Other science and engineering	Management, business, and financial	0.2	1,384	0.2	416
Business Degrees					
General business	Management, business, and financial	0.6	2,360	0.6	979
Accounting	Management, business, and financial	0.5	1,555	0.5	1,615
Business management and administration	Management, business, and financial	0.5	1,131	0.5	563
Marketing	Management, business, and financial	0.8	1,044	0.8	1,015
Finance	Management, business, and financial	0.8	2,505	0.8	1,781
Other business	Management, business, and financial	0.6	1,450	0.6	936
Education Degrees					
General education	Education, legal, community service, arts, and media	0.8	633	0.8	1,070
Elementary education	Education, legal, community service, arts, and media	0.7	535	0.7	1,215
Other education	Education, legal, community service, arts, and media	0.6	420	0.6	1,221
Arts, Humanities, and Other Degrees					
Communications	Management, business, and financial	0.7	1,494	0.7	963
English language and literature	Education, legal, community service, arts, and media	0.6	764	0.6	1,783
Liberal arts	Education, legal, community service, arts, and media	0.9	2,203	0.9	1,387
History	Education, legal, community service, arts, and media	0.9	1,425	0.9	1,536
Fine arts	Education, legal, community service, arts, and media	1.2	1,611	1.2	2,088
Commerical art and graphic design	Education, legal, community service, arts, and media	1.0	1,369	1.0	1,240
Family and consumer sciences	Education, legal, community service, arts, and media	1.2	1,920	1.2	1,931
Physical fitness, parks, recreation, and leisure	Management, business, and financial	0.8	2,319	0.8	1,397
Criminal justice and fire protection	Service	0.7	1,757	0.7	713
Social work	Education, legal, community service, arts, and media	1.1	938	1.1	1,459
Other degrees	Education, legal, community service, arts, and media	0.4	907	0.4	724

Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates, <www.census.gov/acs>.

Appendix Table A-5.

Margins of Error for Median Annual Earnings for Field of Bachelor's Degree for First Major by Select Metropolitan Statistical Areas: 2022

Metropolitan statistical areas	Total population	Educational attainment				Science and engineering	Science- and engineering-related fields	Business	Education	Arts, humanities, and other degrees
		Less than a bachelor's degree		All bachelor's degree holders						
		Percent	Earnings	Percent	Earnings					
Population 25 to 64 with earnings	132,800	0.1	50	0.1	166	299	373	270	348	255
Atlanta-Sandy Springs-Alpharetta, GA	5,902	0.5	425	0.5	995	2,843	3,643	2,200	2,173	1,749
Austin-Round Rock-Georgetown, TX	1,745	1.0	1,456	1.0	1,374	4,328	5,343	3,437	2,877	2,531
Baltimore-Columbia-Towson, MD	1,836	0.6	1,203	0.6	1,434	2,976	2,656	4,457	2,205	3,253
Boston-Cambridge-Newton, MA-NH	2,403	0.5	780	0.5	695	2,434	3,778	2,433	3,607	2,310
Charlotte-Concord-Gastonia, NC-SC	2,770	0.8	597	0.8	1,623	5,174	6,314	3,877	2,328	3,014
Chicago-Naperville-Elgin, IL-IN-WI	2,486	0.4	323	0.4	1,097	1,311	2,552	3,557	1,496	1,983
Cincinnati, OH-KY-IN	3,376	0.7	641	0.7	1,323	2,826	2,901	5,282	4,071	2,724
Dallas-Fort Worth-Arlington, TX	2,719	0.4	402	0.4	1,560	2,000	3,223	3,145	949	1,684
Denver-Aurora-Lakewood, CO	2,107	0.6	998	0.6	1,027	2,239	3,008	3,390	3,209	2,427
Detroit-Warren-Dearborn, MI	882	0.5	450	0.5	1,603	3,147	4,770	2,590	2,995	1,096
Houston-The Woodlands-Sugar Land, TX	2,573	0.5	728	0.5	1,163	2,885	3,748	3,193	1,199	1,767
Las Vegas-Henderson-Paradise, NV	574	0.8	979	0.8	1,403	4,032	8,543	4,354	3,683	4,730
Los Angeles-Long Beach-Anaheim, CA	1,333	0.3	398	0.3	736	1,645	3,267	2,030	3,614	1,546
Miami-Fort Lauderdale-Pompano Beach, FL	595	0.5	460	0.5	795	2,629	3,777	3,110	1,548	2,829
Minneapolis-St. Paul-Bloomington, MN-WI	2,671	0.5	701	0.5	1,374	1,744	3,356	2,595	2,215	2,193
New York-Newark-Jersey City, NY-NJ-PA	3,765	0.3	289	0.3	625	1,245	2,519	2,079	1,936	1,206
Orlando-Kissimmee-Sanford, FL	1,852	0.7	1,013	0.7	1,445	4,198	5,636	3,699	1,980	1,965
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	2,048	0.4	810	0.4	815	2,057	2,336	2,675	2,866	1,419
Phoenix-Mesa-Chandler, AZ	1,421	0.5	701	0.5	1,428	3,856	4,024	3,281	1,821	1,665
Pittsburgh, PA	1,419	0.6	772	0.6	1,069	2,649	3,287	2,697	2,722	1,551
Portland-Vancouver-Hillsboro, OR-WA	2,398	0.7	971	0.7	1,531	3,004	4,506	5,170	3,678	2,800
Riverside-San Bernardino-Ontario, CA	791	0.5	456	0.5	1,900	2,765	2,153	4,414	6,667	3,015
Sacramento-Roseville-Folsom, CA	1,921	0.7	997	0.7	1,879	3,477	7,441	5,373	5,663	2,658
San Antonio-New Braunfels, TX	2,249	0.6	568	0.6	1,228	3,825	1,537	3,037	3,157	2,789
San Diego-Chula Vista-Carlsbad, CA	2,931	0.9	788	0.9	1,865	3,191	3,930	3,712	3,036	3,637
San Francisco-Oakland-Berkeley, CA	560	0.7	592	0.7	1,959	4,973	5,854	3,712	3,813	2,652
Seattle-Tacoma-Bellevue, WA	2,366	0.5	1,186	0.5	2,194	2,221	2,973	5,512	9,065	2,219
St. Louis, MO-IL	1,048	0.5	650	0.5	2,053	2,173	3,417	4,363	5,265	2,113
Tampa-St. Petersburg-Clearwater, FL	1,573	0.7	915	0.7	2,197	3,161	5,280	2,689	1,242	2,945
Washington-Arlington-Alexandria, DC-VA-MD-WV	3,815	0.5	746	0.5	703	1,638	4,748	1,943	3,410	1,918

Source: U.S. Census Bureau, 2022 American Community Survey 1-year estimates, <www.census.gov/acs>.