

AFRICAN AMERICANS

College Majors and Earnings

GEORGETOWN UNIVERSITY



Center
on Education
and the Workforce

McCourt School of Public Policy

Anthony P. Carnevale | Megan L. Fasules | Andrea Porter | Jennifer Landis-Santos

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African Americans

College Majors and Earnings

African Americans Concentrated in Low-Paying Majors

Access to college for African Americans has increased, but African Americans are highly concentrated in lower-paying majors. The college major, which has critical economic consequences throughout life, reflects personal choices but also reflects the fact that African-American students are concentrated in open-access four-year institutions that limited choices of majors offered. African Americans represent 12 percent of the US population, but are under-represented in the number of degree holders in college majors associated with the fastest-growing, highest-paying occupations - STEM, health, and business.

African Americans account for only 8 percent of general engineering majors, 7 percent of mathematics majors, and only 5 percent of computer engineering majors.¹ They are similarly under-represented in business: only 7 percent of finance and marketing majors are African-American. In health majors, they account for 10 percent but are clustered in the lowest-earning detailed major: 21 percent are in health and medical administrative services, compared to only 6 percent in the higher-earning detailed major of pharmacy, pharmaceutical sciences, and administration. African Americans are also highly represented in majors associated with serving the community, which tend to be low-earning - human services and community organization (20%) and social work (19%).

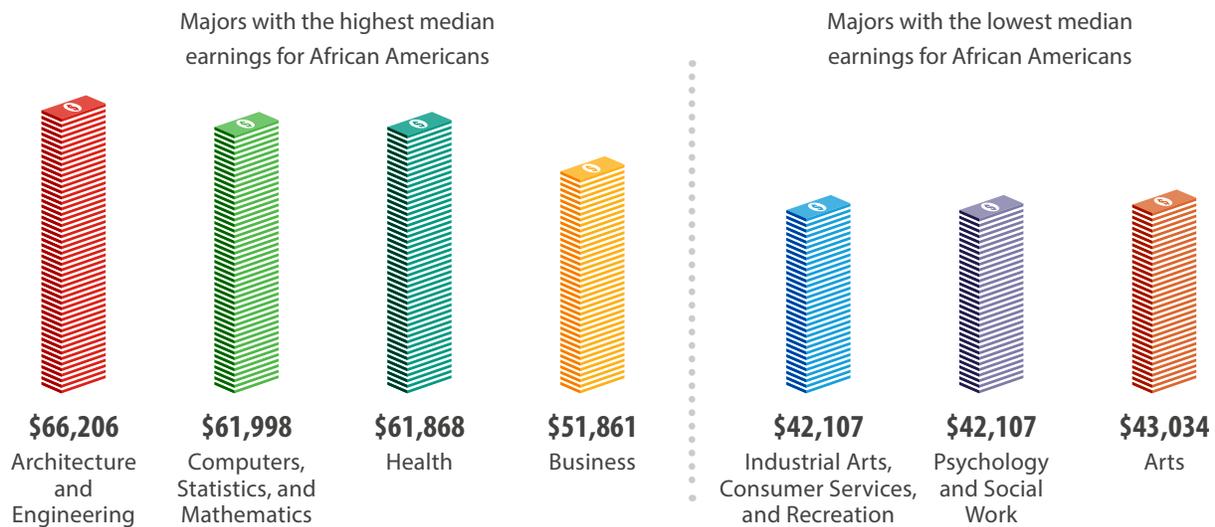
Since 2009, there has not been significant change in the proportion of African Americans across majors. One of the most significant changes occurred within the architecture and engineering major group. The percentage of African Americans with industrial and manufacturing engineering or miscellaneous engineering technologies majors decreased by 4 percentage points and 3 percentage points, respectively. Also, the proportion of African Americans in majors where they were already highly concentrated saw a slight increase: social work and health and medical administrative services both increased by 3 percentage points.

Why Majors and Earnings Matter

Earnings vary greatly among various college majors. African Americans who earned a Bachelor's degree in a STEM-related major, such as architecture or engineering, can earn as much as 50 percent more than African Americans who earned a Bachelor's degree in art or psychology and social work (Figure 1).

¹ There are 137 detailed majors grouped into 15 general categories. For example, architecture, general engineering, and electrical engineering are all specific majors under the larger grouping of architecture and engineering.

Figure 1. Architecture and engineering is the major group with the highest median earnings for African Americans with a Bachelor’s degree.



Bachelor’s degree holders refer to adults between the ages of 21 and 59 with a Bachelor’s degree but no graduate degree. Earnings data are reported for workers employed full-time, full-year. Source: Georgetown University Center on Education and the Workforce analysis of U.S. Census Bureau, *American Community Survey* microdata, 2010-2014.

Yet, African Americans account for 12 percent of all Bachelor’s degree holders who majored in psychology and social work, and only 5 percent of architecture and engineering majors (Table 1).

Table 1. Concentrations of African American Bachelor’s degree holders among major groupings.

Major Group	Percentage African American (%)
Law and Public Policy	15
Psychology and Social Work	12
Health	10
Business	9
Social Sciences	9
Computers, Statistics, and Mathematics	9
Communications and Journalism	8
Physical Sciences	8
Biology and Life Sciences	7
Industrial Arts, Consumer Services, and Recreation	7
Education	7
Humanities and Liberal Arts	6
Architecture and Engineering	5
Arts	5
Agriculture and Natural Resources	3

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Low Representation in the Nation's Fastest Growing Fields

In an analysis of the 137 detailed majors, African Americans who majored in pharmacy, pharmaceutical sciences, and administration have the highest median earnings at \$84,000 (Table 2). Industrial/manufacturing, chemical, electrical, mechanical, computer, and civil engineering graduates follow, with median earnings ranging from \$68,000 to \$76,000.

Table 2. National top 10 median earnings for African Americans with Bachelor's degrees, ranked by highest to lowest earnings (with percentage African American)

Detailed Major	Median Earnings [†] (\$)	Percentage African American (%)
Pharmacy, Pharmaceutical Sciences, and Administration	84,000	6
Industrial and Manufacturing Engineering	76,000	5
Chemical Engineering	73,000	5
Electrical Engineering	72,000	6
Mechanical Engineering	72,000	3
Computer Engineering	69,000	5
Civil Engineering	68,000	3
Nursing	66,000	10
General Engineering	66,000	8
Computer Science	65,000	8

Bachelor's degree holders refer to adults between the ages of 21 and 59 with a Bachelor's degree but no graduate degree. Earnings data are reported for workers employed full-time, full-year. Source: Georgetown University Center on Education and the Workforce analysis of U.S. Census Bureau, *American Community Survey* microdata, 2010-2014.

[†] Earnings at the 50th percentile, ages 25–59

Table 3. National bottom 10 median earnings for African Americans with Bachelor's degrees, ranked by lowest to highest earnings (with percentage African American)

Detailed Major	Median Earnings [†] (\$)	Percentage African American (%)
Early Childhood Education	38,000	10
Human Services and Community Organization	39,000	20
Area, Ethnic, and Civilization Studies	39,000	9
Family and Consumer Sciences	40,000	8
Drama and Theater Arts	40,000	5
Miscellaneous Industrial Arts and Consumer Services	40,000	7
Social Work	41,000	19
Physical Fitness, Parks, Recreation, and Leisure	41,000	8
Theology and Religious Vocations	41,000	11
Philosophy and Religious Studies	42,000	6

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[†] Earnings at the 50th percentile, ages 25–59

African Americans who majored in early childhood education have the lowest median earnings at \$38,000 (Table 3). Most of the majors on the list of lowest median earnings for African Americans with Bachelor's degrees tend to be part of intellectual and caring professions - that is, highly-educated workers whose earnings tend not to reflect their years of higher education.

African Americans are most represented in health and medical administrative services, where they account for 21 percent of terminal Bachelor's degrees (Table 4). Human services and community organization has the second-highest percentage of African Americans, and the second-lowest median earnings. In short, African Americans tend to be better represented in majors with the lowest earnings. The 10 detailed majors with the highest percentage of African Americans (Table 4) consist entirely of majors associated with earnings lower than \$65,000.

Table 4. African Americans tend to be over-represented in low-earning majors, ranked by percentage of African Americans (with median earnings)

Detailed Major	Percentage African American (%)	Median Earnings [†] (\$)
Health and Medical Administration Services	21	46,000
Human Services and Community Organization	20	39,000
Social Work	19	41,000
Public Administration	17	52,000
Criminal Justice and Fire Protection	15	48,000
Sociology	14	44,000
Computer and Information Systems	14	63,000
Human Resources and Personnel Management	14	51,000
Interdisciplinary Social Sciences	13	44,000
Pre-Law and Legal Studies	13	46,000

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[†] Earnings at the 50th percentile, ages 25-59

Conclusion

African Americans who choose majors in well-paying, growing fields are likely to be better positioned to get higher paying jobs. This is especially important to a demographic group that historically has been deprived of opportunities and had fewer economic assets and resources making them especially vulnerable to the family stress created by economic ups and downs. Fewer African Americans in high-paying jobs can translate to fewer positive role models of how to be financially successful for younger generations and fewer opportunities to contribute economically to their family and community. Careful career planning is especially crucial for African-American students to help them avoid debt and underemployment later in life.

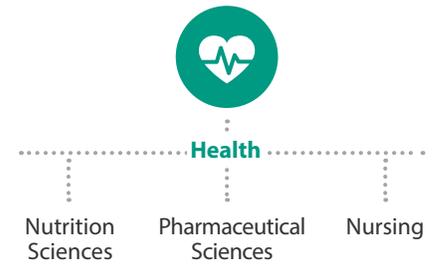
APPENDIX. ALL MAJORS BY GROUP FOR AFRICAN AMERICANS WITH BACHELOR'S DEGREES

BY MEDIAN EARNINGS AND DEGREE CONCENTRATION

Majors fall into two categories:

1. Grouped majors are the family of specific majors.
2. Detailed majors, reflect a specialization of study.

For example, Nutrition Sciences, Pharmaceutical Sciences, and Nursing, these are all specific majors under the larger grouping of Health majors.



Median Earnings [†] (\$)		Percentage African American (%)		
		Current	2009	Difference
Agricultural and Natural Resources				
45,000	General Agriculture	6	3	3
Architecture and Engineering				
56,000	Miscellaneous Engineering Technologies	9	12	-3
55,000	Industrial Production Technologies	8	9	-1
66,000	General Engineering	8	7	1
72,000	Electrical Engineering	6	6	0
73,000	Chemical Engineering	5	5	0
53,000	Architecture	5	4	1
76,000	Industrial and Manufacturing Engineering	5	9	-4
72,000	Mechanical Engineer	3	3	0
68,000	Civil Engineering	3	3	0
Arts				
43,000	Music	7	6	1
40,000	Drama and Theater Arts	5	5	0
43,000	Commercial Art and Graphic Design	5	5	0
45,000	Fine Arts	4	5	-1
Biology and Life Sciences				
47,000	Biology	9	9	0
Business				
51,000	Human Resources and Personnel Management	14	13	1
51,000	Business Management and Administration	12	10	2
53,000	Miscellaneous Business and Medical Administration	10	7	3
52,000	General Business	9	8	1
63,000	Management Information Systems and Statistics	9	9	0
56,000	Accounting	8	8	0
53,000	Operations, Logistics, and E-Commerce	7	7	0
57,000	Finance	7	6	1
48,000	Marketing and Marketing Research	7	7	0
44,000	Hospitality Management	6	4	2

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[†] Earnings at the 50th percentile, ages 25 – 59

Appendix. All Majors by Group for African Americans with Bachelor's Degrees
by Median Earnings and Degree Concentration

Median Earnings [†] (\$)		Percentage African American (%)		
		Current	2009	Difference
Communications and Journalism				
47,000	Communications and Mass Media	9	9	0
46,000	Journalism	7	7	0
47,000	Advertising and Public Relations	6	6	0
Computers, Statistics, and Mathematics				
63,000	Computer and Information Systems	14	13	1
61,000	Information Sciences	11	12	-1
53,000	Miscellaneous Computer	9	--	--
65,000	Computer Science	8	9	-1
62,000	Mathematics	7	6	1
69,000	Computer Engineering	5	4	1
Education				
51,000	Miscellaneous Education	11	10	1
38,000	Early Childhood Education	10	10	0
47,000	Physical and Health Education Teaching	9	7	2
44,000	General Education	9	9	0
48,000	Special Needs Education	7	8	-1
45,000	Secondary Teacher Education	5	6	-1
44,000	Elementary Education	5	5	0
47,000	Language and Drama Education	5	4	1
44,000	Art and Music Education	4	4	0
Health				
46,000	Health and Medical Administrative Services	21	18	3
50,000	Miscellaneous Health Medical Professions	10	10	0
66,000	Nursing	10	9	1
84,000	Pharmacy, Pharmaceutical Sciences, and Administration	6	5	1
49,000	Treatment Therapy Professions	6	6	0
Humanities and Liberal Arts				
43,000	Multi/Interdisciplinary Studies	12	--	--
41,000	Theology and Religious Vocations	11	12	-1
39,000	Area, Ethnic, and Civilization Studies	9	8	1
46,000	Liberal Arts	9	7	2
46,000	English Language and Literature	6	6	0
42,000	Philosophy and Religious Studies	6	6	0
47,000	History	5	5	0
44,000	French, German, Latin, and Other Common Foreign Language Studies	4	4	0

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Appendix. All majors by group for African Americans with Bachelor's Degrees
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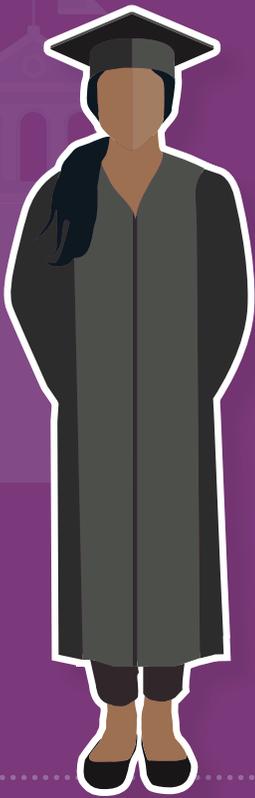
Median Earnings [†] (\$)		Percentage African American (%)		
		Current	2009	Difference
Industrial Arts, Consumer Services, and Recreation				
40,000	Family and Consumer Sciences	8	8	0
41,000	Physical Fitness, Parks, Recreation, and Leisure	8	8	0
40,000	Miscellaneous Industrial Arts and Consumer Services	7	--	--
61,000	Transportation Sciences and Technologies	5	6	-1
Law and Public Policy				
52,000	Public Administration	17	18	-1
48,000	Criminal Justice and Fire Protection	15	14	1
46,000	Pre-Law and Legal Studies	13	14	-1
Physical Sciences				
52,000	Multidisciplinary or General Science	11	10	1
49,000	Chemistry	8	7	1
Psychology and Social Work				
39,000	Human Services and Community Organization	20	21	-1
41,000	Social Work	19	16	3
43,000	Psychology	10	9	1
Social Sciences				
44,000	Sociology	14	14	0
44,000	Interdisciplinary Social Sciences	13	9	4
49,000	General Social Sciences	13	13	0
46,000	Criminology	10	9	1
50,000	Political Science and Government	9	8	1
55,000	Economics	6	6	0

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Prevalence of African-American Bachelor's Degree Holders



African Americans tend to be over-represented in low-earning majors

Top 10 Majors by Percentage of African-American Bachelor's Degree Holders

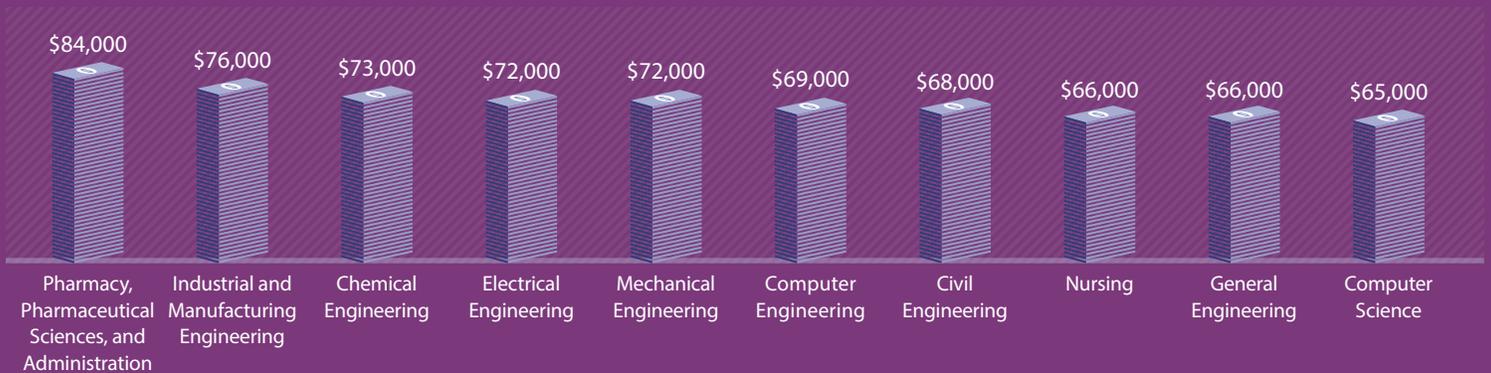
- | | |
|---|---|
| 1 – Health and Medical Administration Services, 21% | 6 – Sociology, 14% |
| 2 – Human Services and Community Organization, 20% | 7 – Computer and Information Systems, 14% |
| 3 – Social Work, 19% | 8 – Human Resources and Personnel Management, 14% |
| 4 – Public Administration, 17% | 9 – Interdisciplinary Social Sciences, 13% |
| 5 – Criminal Justice and Fire Protection, 15% | 10 – Pre-Law and Legal Studies, 13% |



10 Highest-Earnings Majors for African Americans



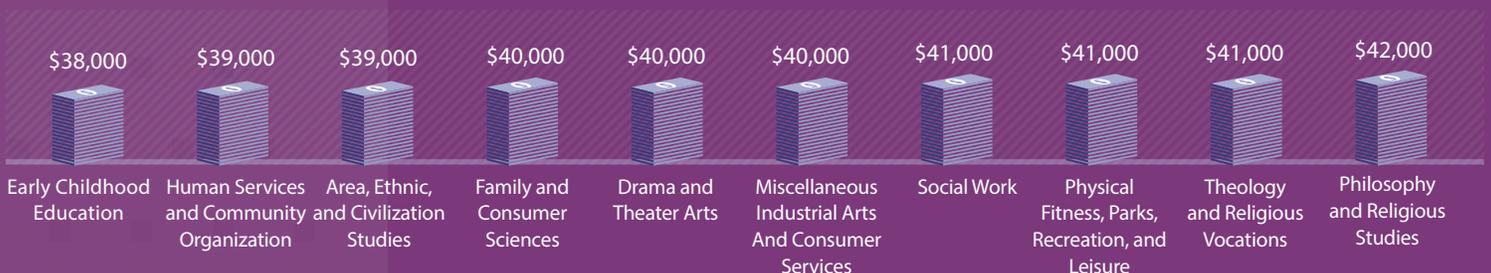
African Americans who majored in **pharmacy, pharmaceutical sciences, and administration** have the highest median earnings at \$84,000.



10 Lowest-Earnings Majors for African Americans



Most of the majors on the list of lowest median earnings for African Americans with Bachelor's degrees tend to be part of intellectual and caring professions - that is, highly educated workers whose earnings tend not to reflect their years of higher education.



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To view the research this graphic is based on, download [African Americans: College Majors and Earnings](#).

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The Georgetown University
Center on Education and the Workforce
3300 Whitehaven Street, NW, Suite 3200
Washington, D.C. 20007

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