

AFRICAN AMERICANS

College Majors and Earnings

GEORGETOWN UNIVERSITY



Center
on Education
and the Workforce

McCourt School of Public Policy

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African Americans

College Majors and Earnings

African Americans are 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 where students have 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 underrepresented 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 in health and medical administrative services, compared to only 6 percent in the higher-earning detailed major of pharmacy, pharmaceutical sciences, and administration. They 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%).

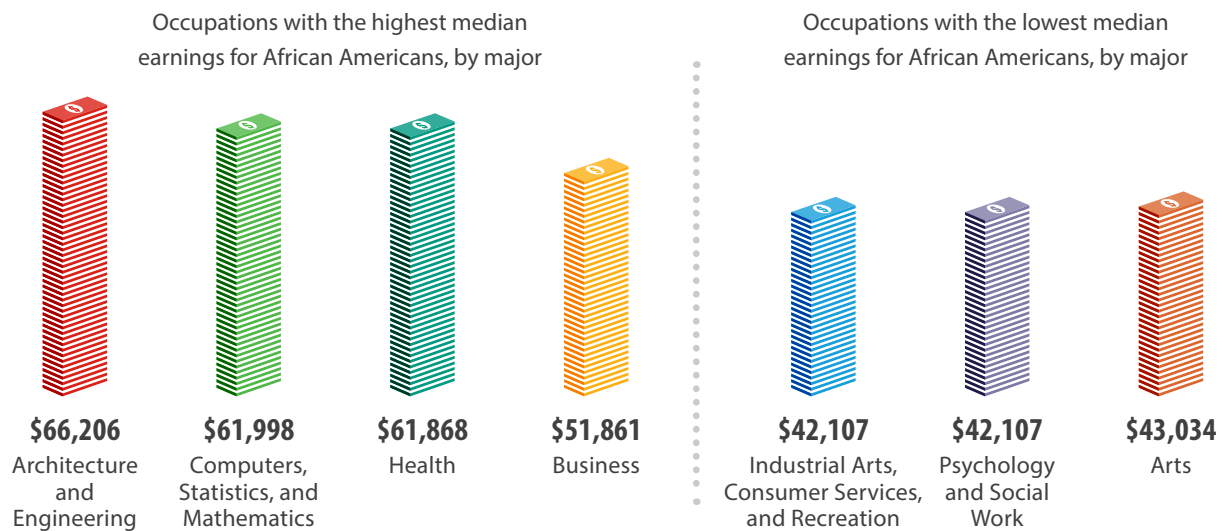
Since 2009, there has not been significant change in the proportion of African Americans across majors. One of the most significant changes occurred within the architecture and engineering major group. The percentage of African Americans with industrial and manufacturing engineering or miscellaneous engineering technologies majors decreased by 4 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.

	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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African American Representation is Low in the Nation's Fastest Growing Fields

In an analysis of the 137 detailed majors, African Americans who majored in pharmacy and 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 \$76,000 to \$68,000.

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

	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 ten median earnings for African Americans with Bachelor's degrees, ranked by lowest to highest earnings (with percentage African American)

	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%

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

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 hold 21 percent of all those with 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 overrepresented in low-earning majors, ranked by percentage of African Americans (with median earnings)

	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, acquire less student debt and nurture future generations. 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

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. Detailed majors with less than 100 observations are not included in this analysis. Source: Georgetown University Center on Education and the Workforce analysis of U.S. Census Bureau, *American Community Survey* microdata, 2010-2014 and Carnevale, Strohl, and Melton, *What's It Worth?*, 2011.

[†] 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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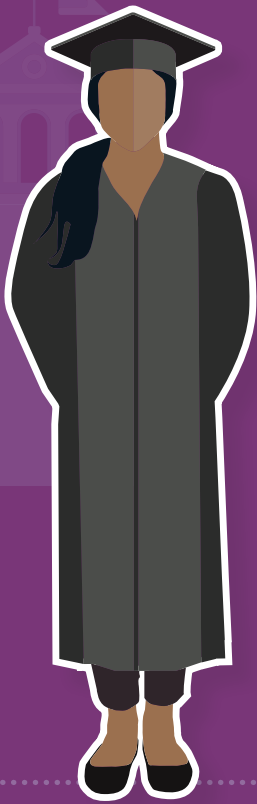
Median Earnings [†]		Percentage African American		
		Current	2009	Difference
	Industrial Arts, Consumer Services, and Recreation			
\$40,000	Family and Consumer Sciences	8%	8%	0
\$41,000	Physical Fitness, Parks, Recreation, and Leisure	8%	8%	0
\$40,000	Miscellaneous Industrial Arts and Consumer Services	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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African Americans

College Majors and Earnings



Prevalence of African American Bachelor's Degree Holders



African Americans tend to be overrepresented in low-earning majors

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

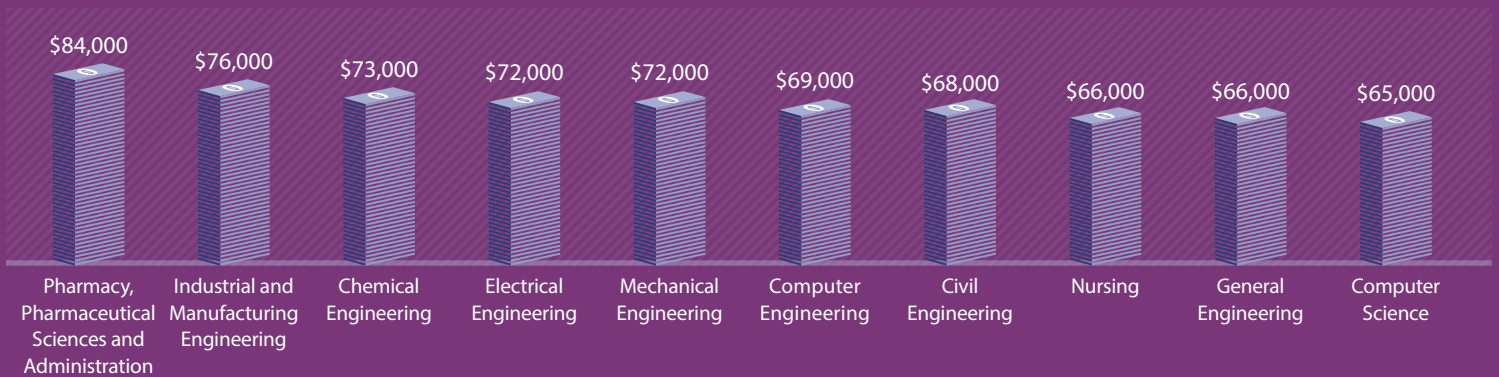
- | | |
|---|---|
| 1 – Health and Medical Administration Services, 21% | 6 – Sociology, 14% |
| 2 – Human Services and Community Organization, 20% | 7 – Computer and Information Systems, 14% |
| 3 – Social Work, 19% | 8 – Human Resources and Personnel Management, 14% |
| 4 – Public Administration, 17% | 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



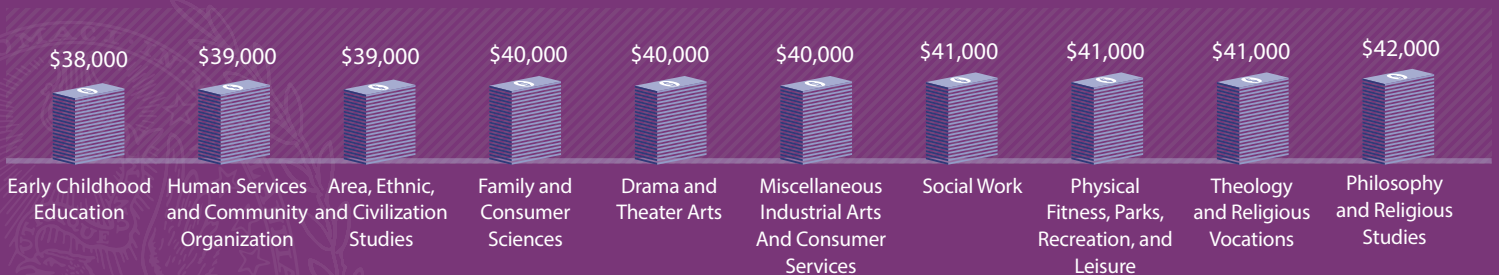
African Americans who majored in **pharmacy and pharmaceutical sciences and administration** have the highest median earnings at **\$84,000**.



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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