

Computers and Mathematics

This group includes the following majors:

- Applied Mathematics
- Communication Technologies
- Computer Administration Management and Security
- Computer and Information Systems
- Computer Engineering
- Computer Networking and Telecommunications
- Computer Programming and Data Processing
- Computer Science
- Information Sciences
- Mathematics
- Mathematics and Computer Science

Computers and Mathematics account for 5.1 percent of all majors. Median earnings for those with only a Bachelor's degree who majored in Computers and Mathematics are \$70,000.¹ Less than a third (31 percent) of people in these majors are women, and 69 percent are men. However, women with these majors make, in the aggregate, \$13,000 less than men. The racial makeup of these majors, on average, is 67 percent White, 16 percent Asian, 9 percent African-American, 7 percent Hispanic, and 1 percent Other Races.² Earnings for Asians (\$71,000), African-Americans (\$59,000), Hispanics (\$55,000), and Other Races (\$50,000) are less than the \$73,000 in median wages earned by Whites.

Earnings in Computers and Mathematics can vary widely, with the 25th percentile earning \$48,000 and the 75th percentile earning \$100,000 — a difference of \$52,000. The major with the highest median earnings is Mathematics and Computer Science, and the major with the lowest median is Communication Technologies.

About 32 percent of people with these majors obtain a graduate degree and, as a result, get an average earnings boost of 31 percent.

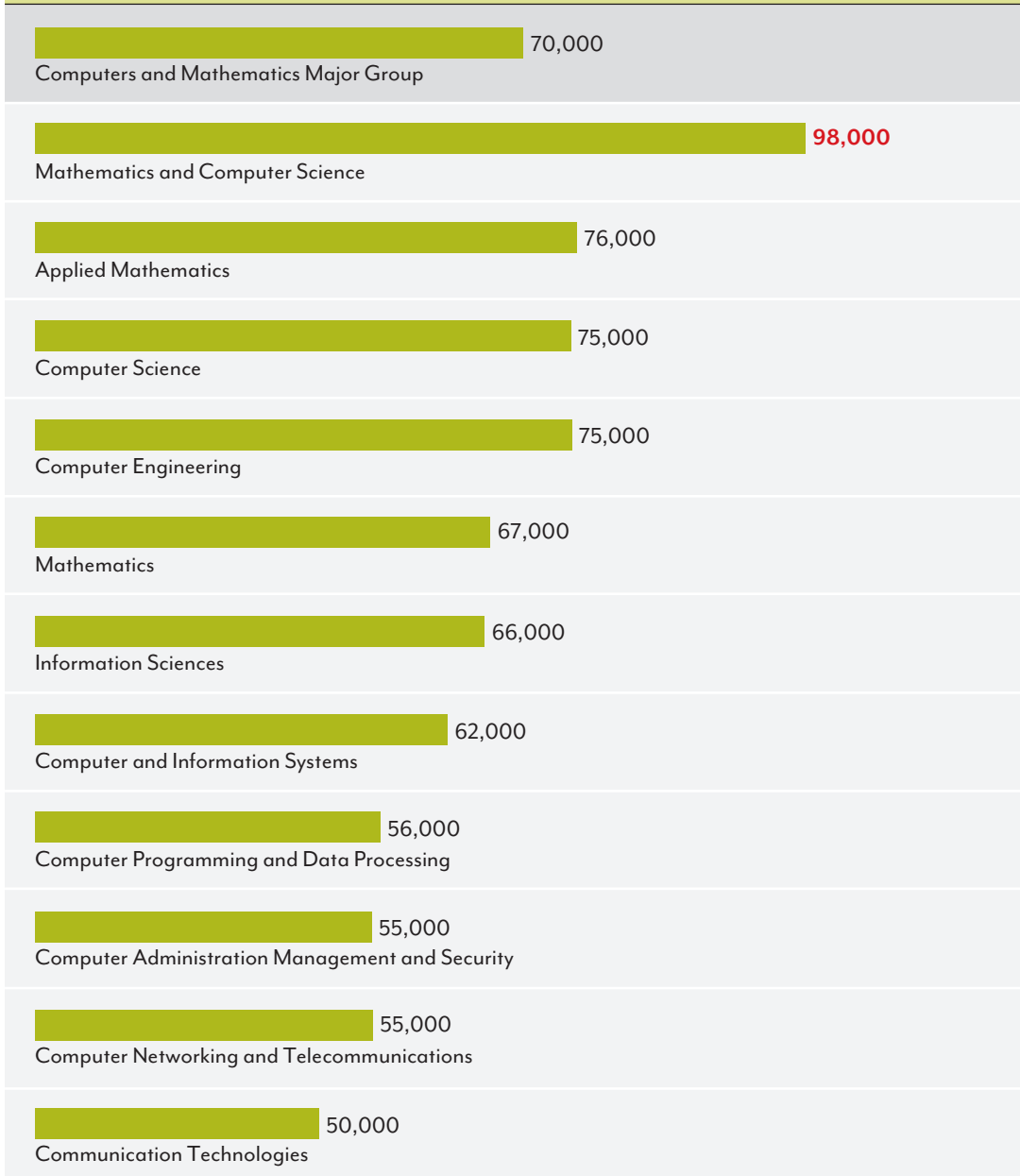
Of people who majored in Computers and Mathematics, 46 percent work in Computers, 16 percent in Management, 7 percent in Office, 6 percent in Sales, and 4 percent in Business occupations. By industry, 26 percent work in Professional and Business Services, 12 percent in Financial Services, 11 percent in Manufacturing, 7 percent in Information Services, and 7 percent in Education Services.

Of those with a Bachelor's in Computers and Mathematics who are in the labor force and employed, 91 percent of those people work full-time. About 6 percent are unemployed.

¹ All of the earnings data presented here is on full-time, full-year workers with a Bachelor's degree only.

² Due to rounding, these may not add to 100 percent.

MEDIAN EARNINGS OF COMPUTERS AND MATHEMATICS MAJOR GROUP*



* Full-time, full-year workers with a terminal Bachelor's.

ALL

Computers and Mathematics Major Group

Applied Mathematics

Communication Technologies

Computer Administration Management and Security

Computer and Information Systems

Computer Engineering

Computer Networking and Telecommunications

Computer Programming and Data Processing

Computer Science

Information Sciences

Mathematics

Mathematics and Computer Science

POPULARITY OF MAJORS[†]

Total Bachelor's	1,728,959	14,765	55,657	36,500	240,508	146,057	58,836	27,858	718,316	68,546	354,087	7,829
% of Major Group	100	1	3	2	14	8	3	2	42	4	20	<0.5

MEDIAN EARNINGS BY MAJOR*

Median earnings	70,000	76,000	50,000	55,000	62,000	75,000	55,000	56,000	75,000	66,000	67,000	98,000
-----------------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	---------------

EARNINGS AT THE 25TH AND 75TH PERCENTILE*

Earnings at the 25th percentile	48,000	49,000	35,000	40,000	45,000	55,000	39,000	35,000	50,000	50,000	42,000	75,000
Earnings at the 75th percentile	100,000	101,000	70,000	75,000	86,000	100,000	80,000	82,000	100,000	90,000	100,000	134,000
Difference	52,000	52,000	35,000	35,000	41,000	45,000	41,000	47,000	50,000	40,000	58,000	59,000

PERCENT OBTAINING A GRADUATE DEGREE

Did not obtain graduate degree (%)	68	48	89	81	80	67	81	81	72	76	53	71
Obtain graduate degree (%)	32	52	11	19	20	33	19	19	28	24	47	29

EARNINGS BOOST FROM OBTAINING A GRADUATE DEGREE

% Earnings Boost from Graduate Degree	31	56	•	44	25	16	25	•	25	22	33	•
---------------------------------------	----	-----------	---	----	----	----	----	---	----	----	----	---

WORK STATUS*

Full-time (%)	91	86	83	88	94	94	91	92	92	93	86	89
Part-time (%)	9	14	17	12	6	6	9	8	8	7	14	11

PERCENT EMPLOYED**

Employed (%)	94	95	92	94	94	95	93	94	94	95	95	90
--------------	----	-----------	----	----	----	-----------	----	----	----	-----------	-----------	----

[†] The ACS data are best used to discuss distributional characteristics of the underlying population. However, we also include the number of degree holders to provide the reader with an 'order of magnitude' sense of the number of people with this major.

* Full-time, full-year workers with a terminal Bachelor's.

• Sample size was too small to be statistically valid.

** Of people in the labor force.

GENDER

	Computers and Mathematics Major Group	Applied Mathematics	Communication Technologies	Computer Administration and Security	Computer and Information Systems	Computer Engineering	Computer Networking and Telecommunications	Computer Programming and Data Processing	Computer Science	Information Sciences	Mathematics	Mathematics and Computer Science
GENDER COMPOSITION OF MAJORS												
Percent Female	31	36	33	31	35	19	27	31	27	29	44	33
Percent Male	69	64	67	69	65	81	73	69	73	71	56	67
EARNINGS BY GENDER*												
Female Median Earnings	60,000	•	50,000	45,000	56,000	67,000	44,000	•	70,000	75,000	54,000	•
Male Median Earnings	73,000	78,000	50,000	60,000	65,000	80,000	60,000	60,000	79,000	65,000	75,000	•
Difference	13,000	•	•	15,000	9,000	13,000	16,000	•	9,000	-10,000	21,000	•

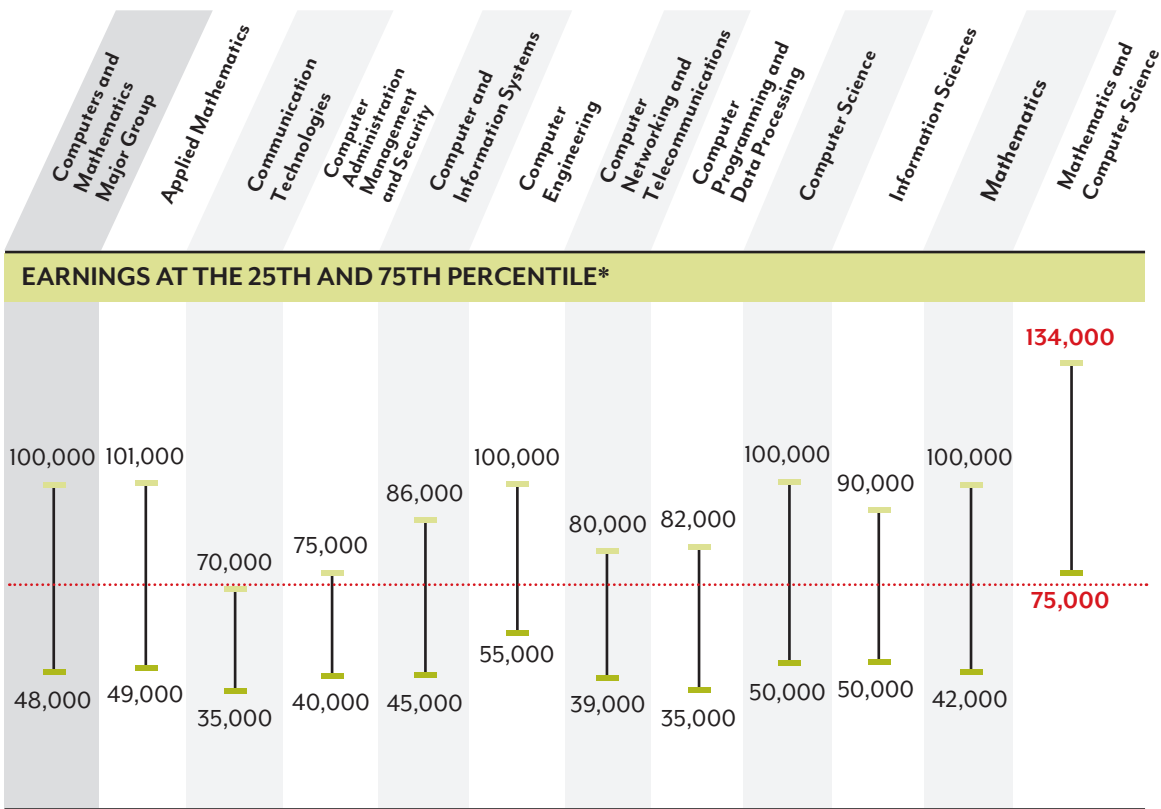
* Full-time, full-year workers with a terminal Bachelor's.

• Sample size was too small to be statistically valid.

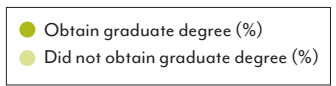
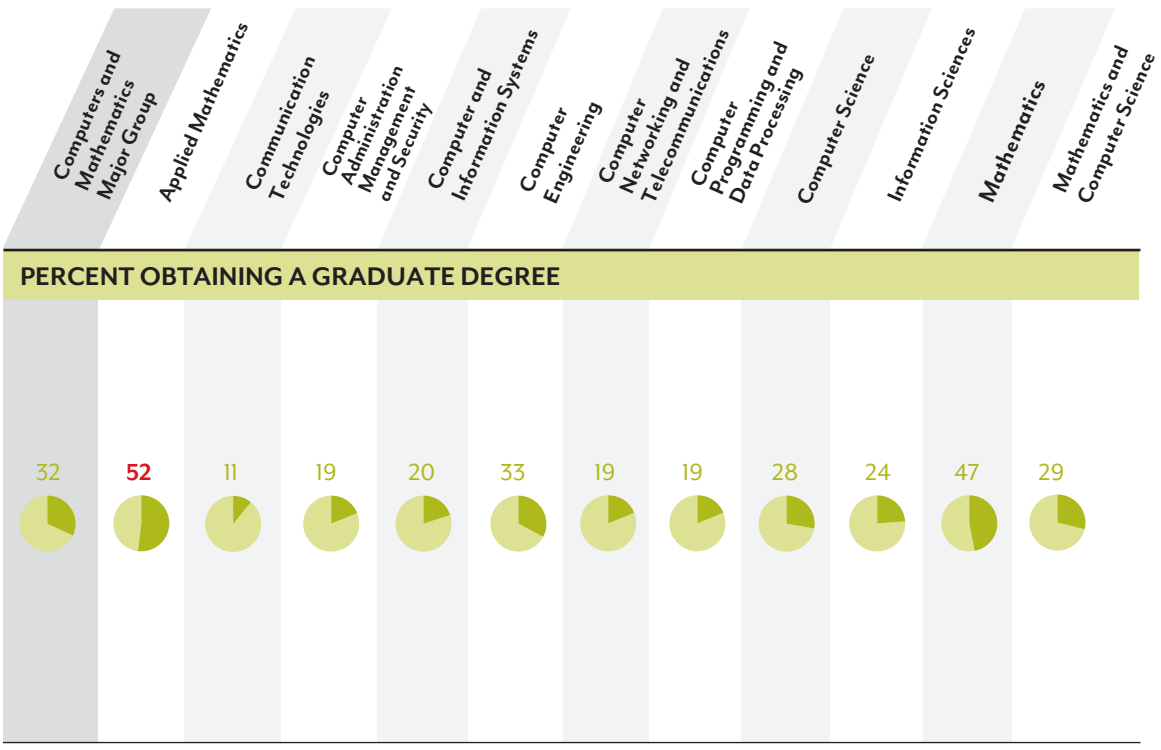
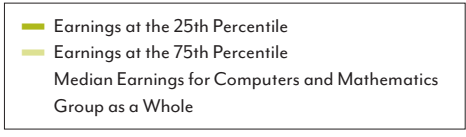
RACE AND ETHNICITY

	Computers and Mathematics Major Group	Applied Mathematics	Communication Technologies	Computer Administration and Security	Computer and Information Systems	Computer Engineering	Computer Networking and Telecommunications	Computer Programming and Data Processing	Computer Science	Information Sciences	Mathematics	Mathematics and Computer Science
RACIAL AND ETHNIC COMPOSITION OF MAJORS^Δ												
% White	67	66	79	69	64	54	72	67	64	68	78	82
% African- American	9	6	7	13	13	4	14	5	9	12	6	8
% Hispanic	7	8	7	9	8	9	7	12	7	6	5	2
% Asian	16	20	6	9	14	33	7	15	19	13	10	4
% Other Races and Ethnicities	1	1	1	<0.5	1	<0.5	1	<0.5	1	<0.5	1	4

^Δ Due to rounding, these may not add to 100 percent.



* Full-time, full-year workers with a terminal Bachelor's.



WHERE COMPUTERS AND MATHEMATICS MAJORS END UP BY OCCUPATION*

	1st Occupation (%)	2nd Occupation (%)	3rd Occupation (%)	4th Occupation (%)	5th Occupation (%)
Computers and Mathematics Major Group	COMP (46)	MGMT (16)	OFF (7)	SALES (6)	BUS (4)
Applied Mathematics	COMP (33)	MGMT (19)	SALES (10)	EDU (6)	FIN (5)
Communication Technologies	ARTS (26)	MGMT (14)	SALES (14)	COMP (10)	OFF (9)
Computer Administration Management and Security	COMP (38)	MGMT (17)	SALES (8)	OFF (6)	BUS (6)
Computer and Information Systems	COMP (48)	MGMT (17)	OFF (8)	BUS (5)	SALES (4)
Computer Engineering	COMP (55)	MGMT (14)	ENGR (10)	OFF (4)	SALES (4)
Computer Networking and Telecommunications	COMP (22)	MGMT (16)	SALES (13)	OFF (11)	ARTS (11)
Computer Programming and Data Processing	COMP (49)	OFF (13)	MGMT (6)	SALES (6)	PROD (5)
Computer Science	COMP (55)	MGMT (17)	OFF (5)	SALES (5)	ENGR (3)
Information Sciences	COMP (46)	MGMT (18)	BUS (8)	SALES (7)	OFF (7)
Mathematics	COMP (26)	MGMT (17)	EDU (11)	SALES (9)	OFF (8)
Mathematics and Computer Science	COMP (42)	MGMT (37)	SALES (7)	TRAN (3)	EDU (3)

* Full-time, full-year workers with a terminal Bachelor's.

Occupation Abbreviations:

Architecture = ARCH
 Arts = ARTS
 Blue Collar = BC
 Building = BLDG
 Business = BUS
 Community Service = COMM
 Computer Services = COMP
 Construction = CON
 Education = EDU
 Engineering = ENGR
 Finance = FIN
 Food Service = FOOD

Health Professionals = HLTH PROF
 Health Support = HLTH SUP
 Installation = INST
 Legal = LGL
 Life Science = LS
 Management = MGMT
 Office = OFF
 Personal Service = PERS
 Production = PROD
 Protective Services = PROT
 Sales = SALES
 Social Science = SS
 Transportation = TRAN

WHERE COMPUTERS AND MATHEMATICS MAJORS END UP BY INDUSTRY*

	1st Industry (%)	2nd Industry (%)	3rd Industry (%)	4th Industry (%)	5th Industry (%)
Computers and Mathematics Major Group	PROF (26)	FIN (12)	MAN-d (11)	INFO (7)	EDU (7)
Applied Mathematics	FIN (18)	PROF (15)	TRAN (11)	EDU (10)	MAN-d (8)
Communication Technologies	PROF (19)	INFO (18)	MAN-nd (10)	RETL (8)	FIN (8)
Computer Administration Management and Security	PROF (19)	FIN (12)	PUB (9)	INFO (8)	EDU (8)
Computer and Information Systems	PROF (24)	FIN (13)	PUB (10)	MAN-d (9)	EDU (8)
Computer Engineering	PROF (36)	MAN-d (20)	FIN (8)	INFO (7)	PUB (5)
Computer Networking and Telecommunications	INFO (19)	PROF (12)	RETL (10)	FIN (10)	MAN-d (9)
Computer Programming and Data Processing	PROF (26)	FIN (14)	HS (11)	MAN-d (9)	RETL (8)
Computer Science	PROF (31)	MAN-d (12)	FIN (10)	INFO (7)	RETL (6)
Information Sciences	PROF (27)	FIN (13)	MAN-d (9)	PUB (8)	INFO (7)
Mathematics	FIN (17)	PROF (17)	EDU (15)	MAN-d (9)	RETL (6)
Mathematics and Computer Science	PROF (43)	FIN (12)	MAN-d (11)	EDU (6)	TRAN (5)

* Full-time, full-year workers with a terminal Bachelor's.

Industry Abbreviations:

Administrative Services = ADMN

Agriculture = AG

Arts = ARTS

Construction = CON

Education Services = EDU

Financial Services = FIN

Food Service = FS

Health Services = HS

Information = INFO

Management Services = MGMT

Manufacturing (durable) = MAN-d

Manufacturing (non-durable) = MAN-nd

Mining = MNG

Other Service = OS

Professional Services = PROF

Public Administration = PUB

Real Estate = RE

Retail Trade = RETL

Sales = SALES

Social Science = SS

Transportation = TRAN

Utilities = UTIL

Wholesale Trade (durable) = WHLS-d

Wholesale Trade (non-durable) = WHLS-nd