

MASTER OF SCIENCE IN ANALYTICS

2023 EMPLOYMENT REPORT

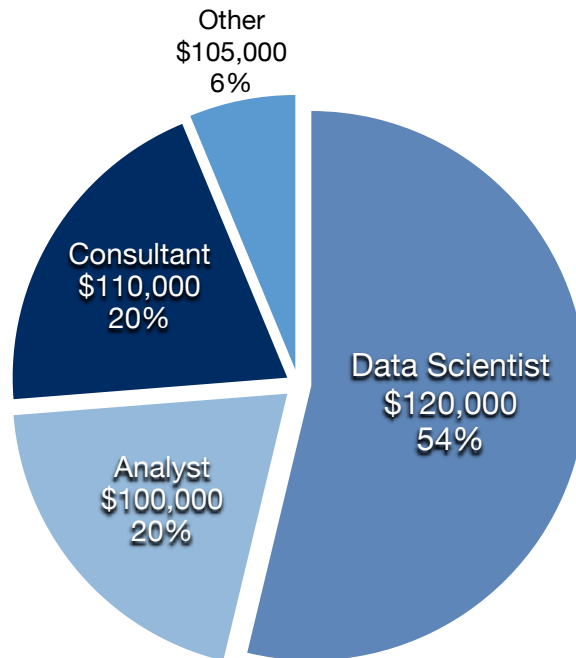
Number of graduates (96% completion rate):	89
Number of graduates seeking new employment:	89
Candidates employed at graduation:	80
Placement rate at graduation:	90%
Average base salary:	\$113,500
Median base salary:	\$116,500
Number of employers interviewing:	103
Number of employers hiring one or more candidates:	32
Total number of reported job offers:	141
Job placements facilitated by the Institute:	94%
Median net increase in earnings:	77%
Median ROI payback period (in months):	20
Job placements based in North Carolina:	55%
Job placements based in U.S.:	100%
Candidates reporting salary data:	100%

Placement results for Class of '23 reported upon graduation, May 19, 2023.

SELECTED POSITIONS FILLED

Actuarial Data Scientist	Financial Analyst
AI/ML Data Scientist	Marketing Analytics Manager
Associate Data Scientist	Product Services Engineer
Business Analyst	Quant Solutions Engineering Associate
Consultant	Research Data Scientist
Data Analyst	Senior Analyst
Data and Analytics Associate	Senior Analytics Consultant
Data Science Analyst	Senior Associate, Quant Analytics
Data Scientist	Senior Business Analyst
Data Scientist Associate	Senior Consultant
Data Scientist Associate Senior	Senior Data Analyst
Data Scientist Consultant	Senior Data Engineer
Data Scientist Senior Consultant	Senior Pricing Analyst
Data Scientist, Assistant VP	Software Developer
Data Scientist/Software Engineer	Software/Application Developer

MAJOR TYPES OF POSITIONS AND MEDIAN BASE SALARIES



COMPENSATION BY EXPERIENCE LEVEL

	ANNUAL BASE SALARY				SIGNING BONUS
	Total	Prior Work Experience			
		None	1-2 Years	3+ Years	
Mean	\$113,500	\$109,700	\$114,000	\$118,600	\$8,200
Maximum	\$155,000	\$125,000	\$135,000	\$155,000	\$20,000
75th Percentile	\$120,000	\$120,000	\$120,000	\$125,000	\$10,000
Median	\$116,500	\$110,000	\$120,000	\$120,000	\$7,250
25th Percentile	\$104,375	\$100,000	\$107,500	\$110,000	\$5,000
Minimum	\$87,500	\$90,000	\$95,000	\$87,500	\$3,000
N	80	38	15	27	56
% Reporting	100%	48%	19%	34%	70%

Notes: Data with respect to salaries and bonuses are self-reported by graduates (without anonymity) and whenever possible verified by the employer in cases where placement is arranged by the Institute (i.e., most candidates). All job placements are full-time paid positions. Data are made public here to guide prospective students and employers. Annual base salary figures do not include signing bonuses, annual bonuses, equity or options, relocation allowances, or other forms of one-time compensation guaranteed upon signing. One job is contingent on passing security clearance. The MSA is a STEM-qualified degree. International graduates are eligible for Optional Practical Training (OPT). Commencement is typically held on the first weekend in May, prior to the university's official graduation date. Employment results are reported each year on or about May 15 for consistency.

DISCLAIMER: The Institute has 16-year proven track record having placed over 1,300 (99%) of its graduates in full-time professional positions within 90-days of graduation, but it does not under any circumstance offer a guarantee of employment upon completion of the degree.

EMPLOYERS

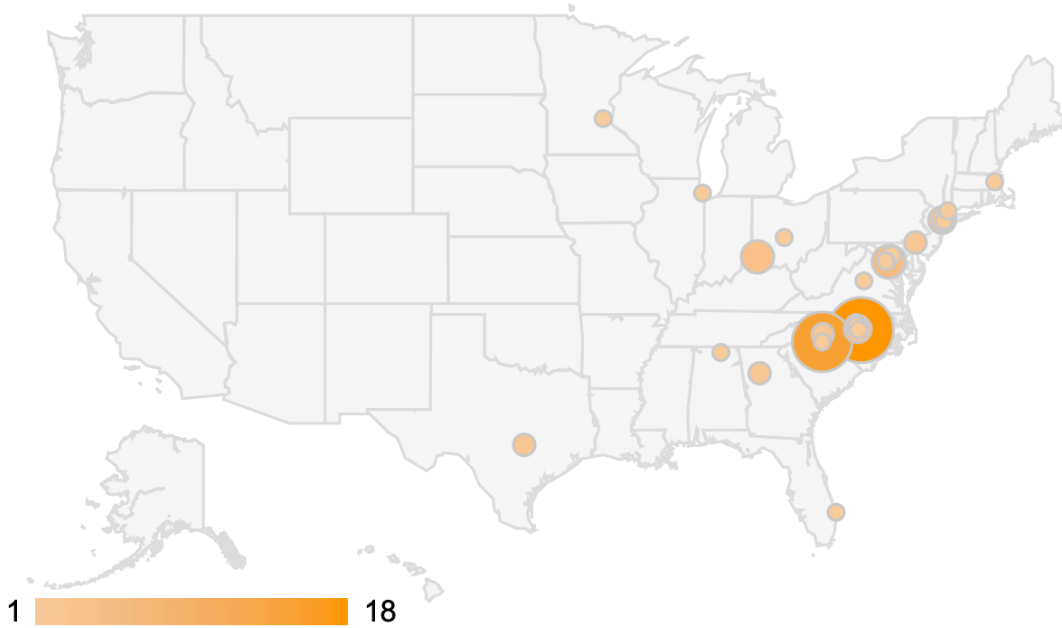
(n = 40; with 32 employers succeeding in hiring one or more candidates)

Abt Associates	JPMorgan Chase*
Align Technology*	LatentView Analytics
Ankura	LendingTree*
Beghou Consulting	Lowe's Companies
BentallGreenOak*	NC Joint Underwriters Association
Cedar Point	NextEra Analytics
Centene Corporation	OneMain Financial*
Cisco Systems	PenFed Credit Union*
Collins Aerospace	RTI International
CreateA1	Slalom
CVSHealth	State Employee's Credit Union
Discover Financial Services	Swiss Re
Elder Research	Terminix
Elevate Credit	The Home Depot
EY	Truist
Fidelity Investments	Ubiety Technologies
Fifth Third Bank*	UNC Shep's Center
FRG	Universal Music Group
General Mills	Visionist
Guidehouse*	Wells Fargo*

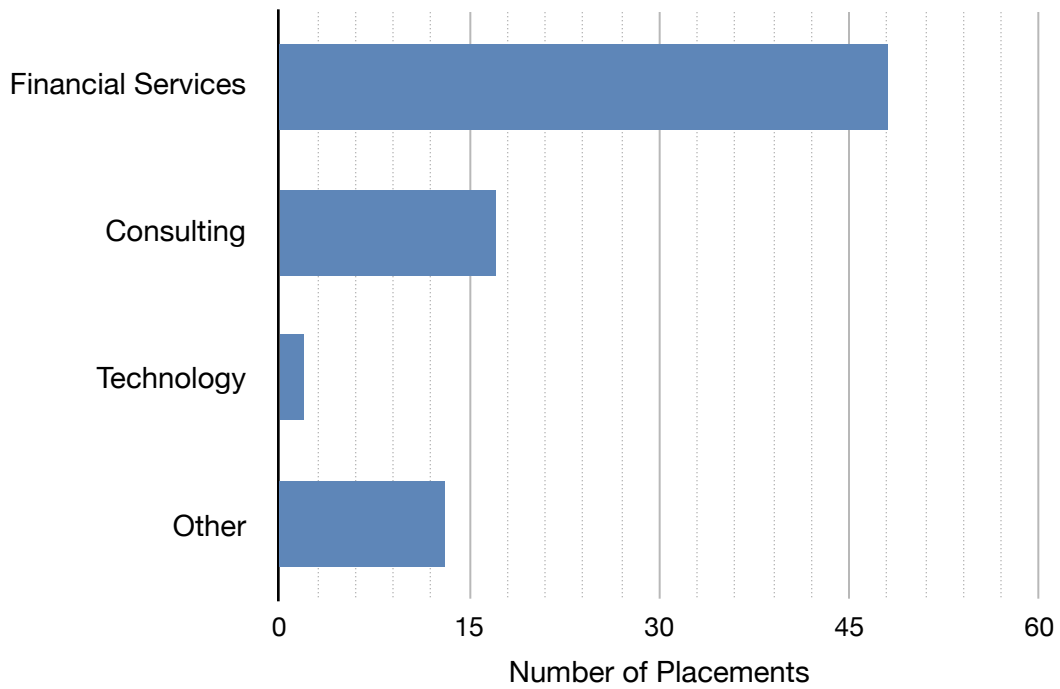
Bold = employers that succeeded in hiring one or more candidates.

* = employers that hired more than one candidate.

EMPLOYMENT BY GEOGRAPHIC LOCATION



DISTRIBUTION OF EMPLOYMENT BY INDUSTRY SECTOR



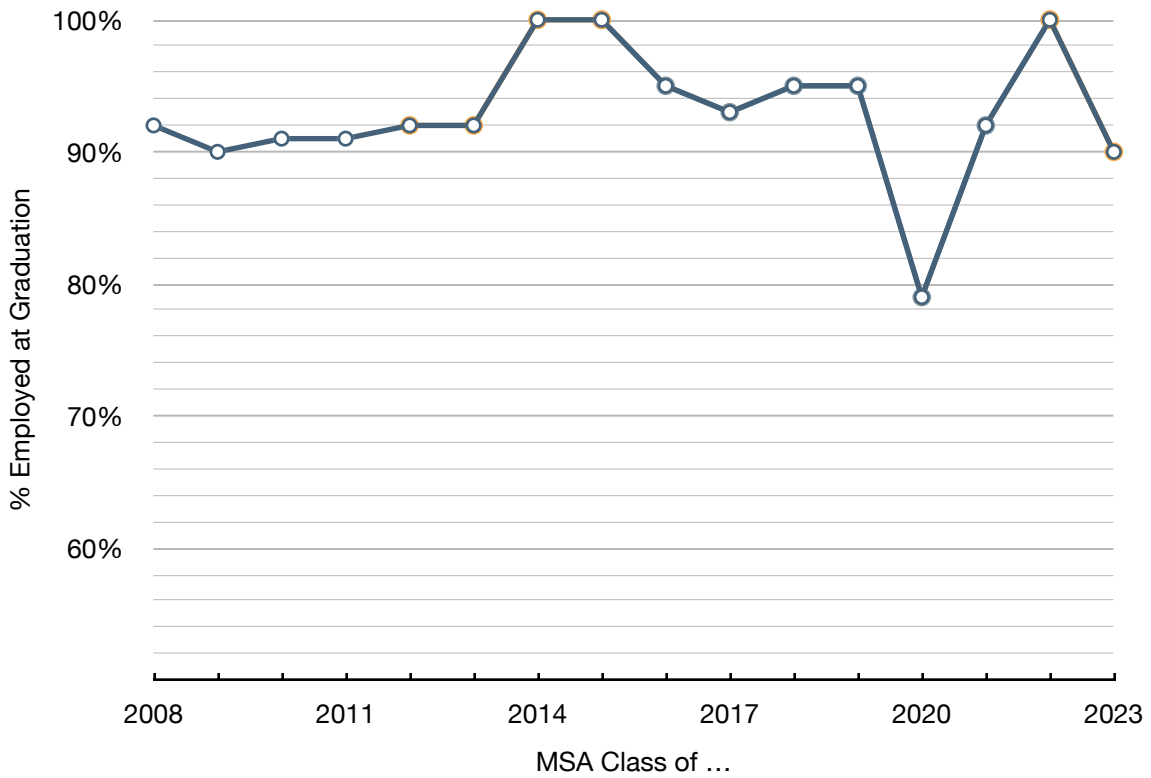
COMPENSATION BY MAJOR POSITION CATEGORIES

	ANNUAL BASE SALARY				
	All	Data Scientist	Analyst	Consultant	Other
Mean	\$113,500	\$119,200	\$101,600	\$113,300	*
Maximum	\$155,000	\$143,520	\$120,000	\$155,000	*
75th Percentile	\$120,000	\$120,000	\$105,000	\$121,250	*
Median	\$116,500	\$120,000	\$100,000	\$110,000	*
25th Percentile	\$104,375	\$119,000	\$98,750	\$100,000	*
Minimum	\$87,500	\$95,000	\$90,000	\$87,500	*
N	80	43	16	16	5
% of Total	100%	54%	20%	20%	6%

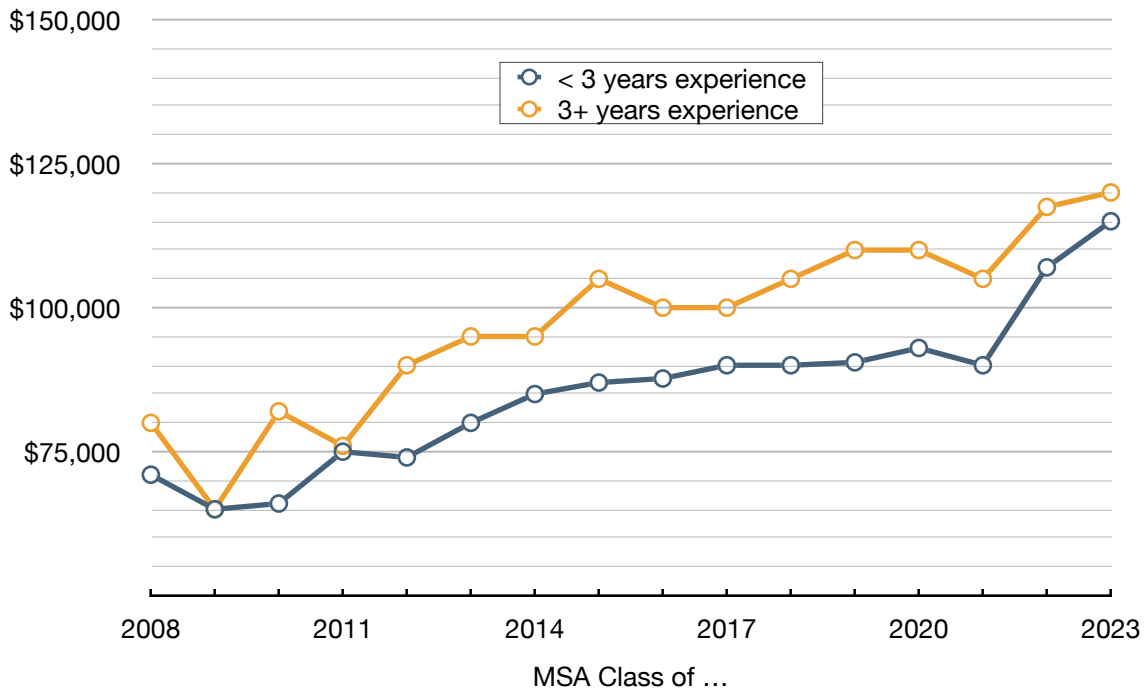
COMPENSATION BY AGE AND GENDER

	ANNUAL BASE SALARY					
	All	Age Brackets			Gender Identity	
		20–24	25–29	30+	Men	Women
Mean	\$113,500	\$111,450	\$112,500	\$122,500	\$113,800	\$112,900
Maximum	\$155,000	\$135,000	\$143,520	\$155,000	\$155,000	\$135,000
75th Percentile	\$120,000	\$120,000	\$120,000	\$125,000	\$120,000	\$120,000
Median	\$116,500	\$117,500	\$110,000	\$120,000	\$120,000	\$112,500
25th Percentile	\$104,375	\$100,000	\$103,750	\$117,250	\$103,125	\$106,250
Minimum	\$87,500	\$90,000	\$87,500	\$102,500	\$87,500	\$90,000
N	80	40	28	12	50	30
% of Total	100%	50%	35%	15%	62.5%	37.5%

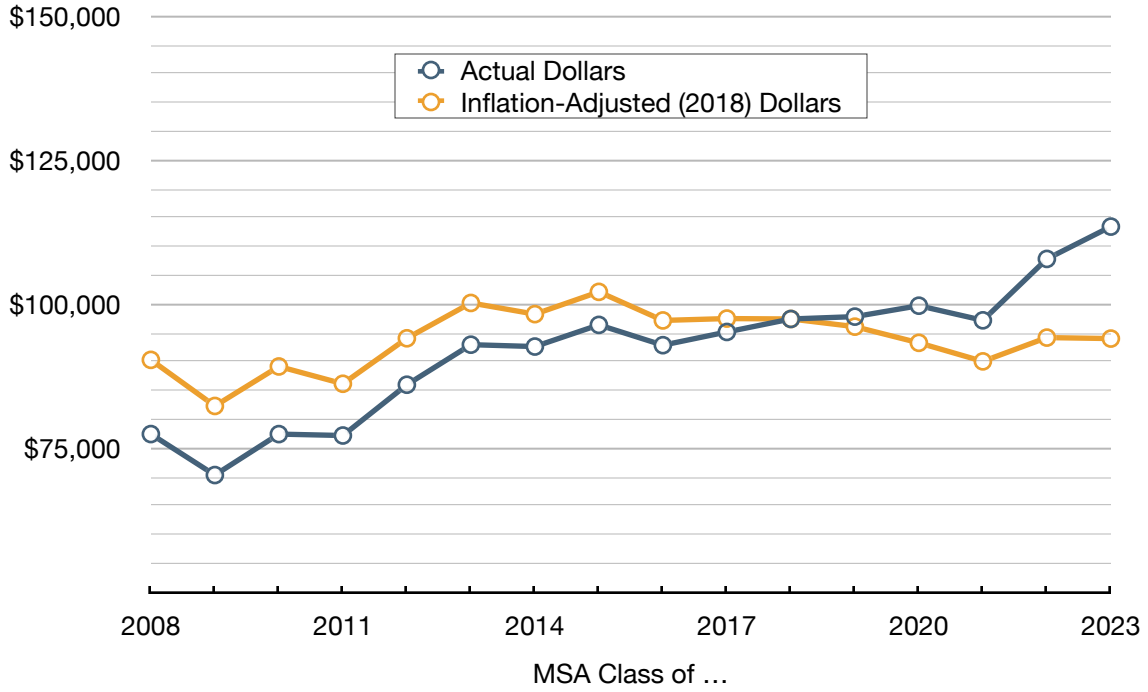
Employment at Graduation



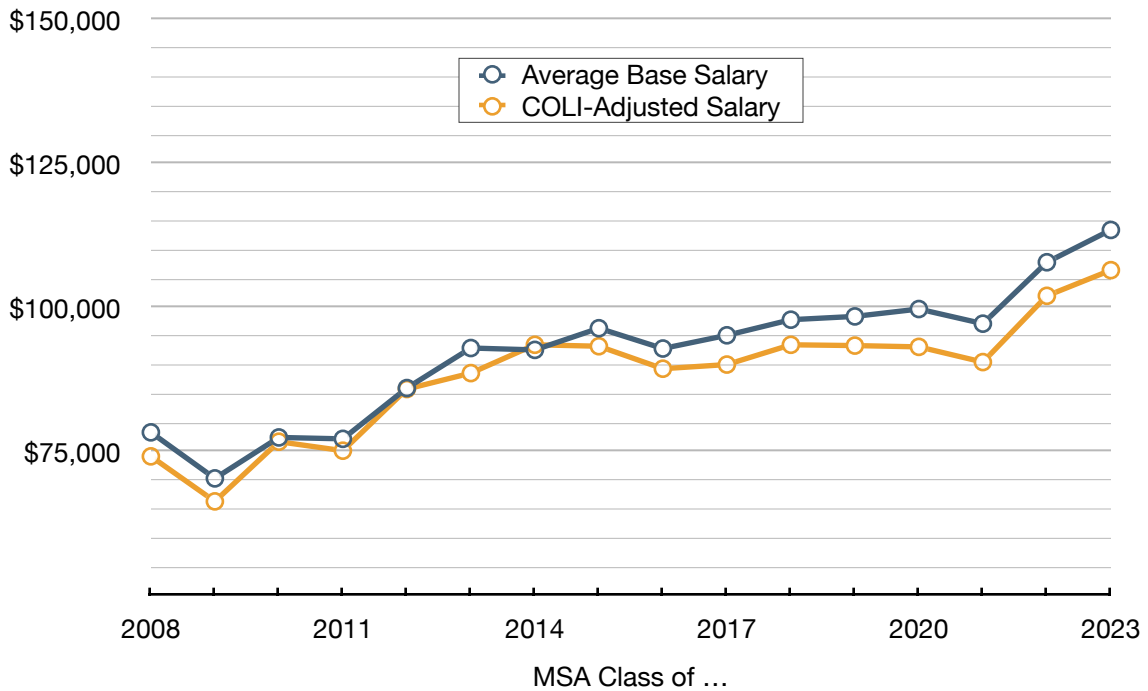
MEDIAN BASE STARTING SALARY BY LEVEL OF PRIOR WORK EXPERIENCE



INFLATION-ADJUSTED AVERAGE BASE SALARY BY COHORT YEAR



COST OF LIVING INDEX (COLI) ADJUSTED AVERAGE BASE SALARY BY LOCATION OF EMPLOYMENT



STUDENT RETURN ON INVESTMENT

	NC Resident	Non-Resident
Number of Respondents	25	4
Pre-MSA Salary Median	\$62,000	*
(+) Tuition & Fees	\$28,900	*
(-) Signing Bonus	\$5,300	*
Total Investment	\$85,600	*
Post MSA Salary Median	\$118,000	*
(-) Pre-MSA Salary	\$62,000	*
Net Salary Increase	\$56,000	*
Payback Period (months)	18	*
Net Increase in Earnings	90%	*

Based on graduates with full-time domestic employment prior to program entry. There were too few domestically employed non-NC residents to calculate an ROI. The average net increase in salary for all 29 graduates with prior domestic employment is \$49,700, with a 77% increase in earnings, and payback period of 20 months. Eleven graduates with prior employment outside of the U.S. (with earnings in other currencies) are not included.

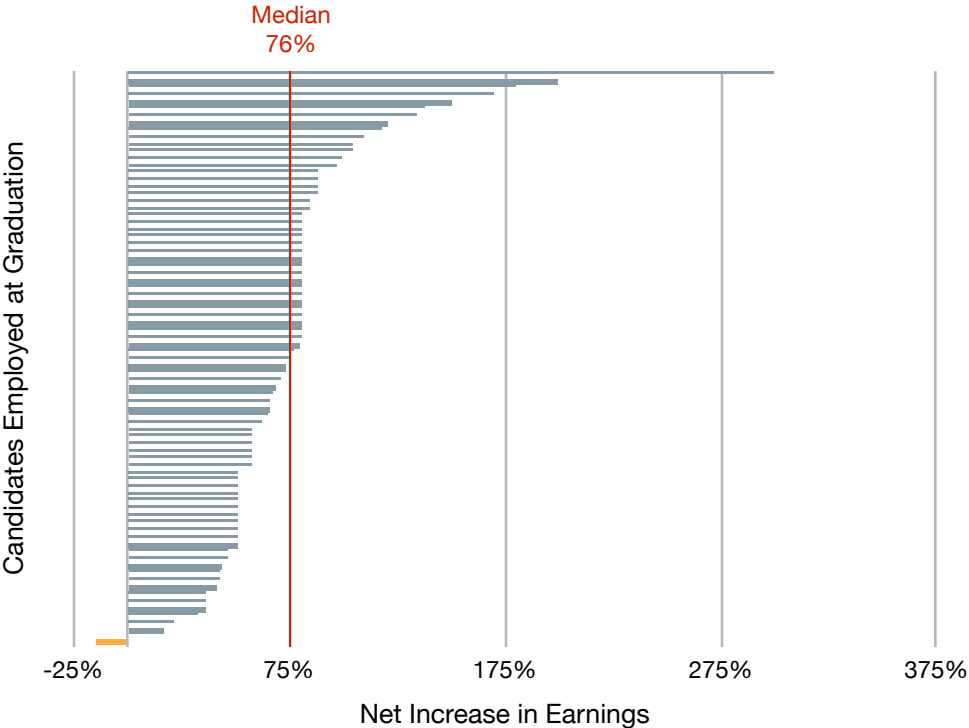
PAYBACK PERIOD CALCULATION

$$\text{Payback Period (in months)} = \frac{(\text{Pre-MSA Salary} + \text{Tuition}) - \text{Signing Bonus}}{\text{Post-MSA Salary} - \text{Pre-MSA Salary}} \times 12$$

Notes: Respondents provided information about their pre- and post-MSA annual base salaries, signing bonuses, and residency status (which determines tuition payments). The ROI payback period is calculated for each candidate employed by graduation, based on their individual circumstances (residency, tuition, pre- and post-salaries, and signing bonuses)..

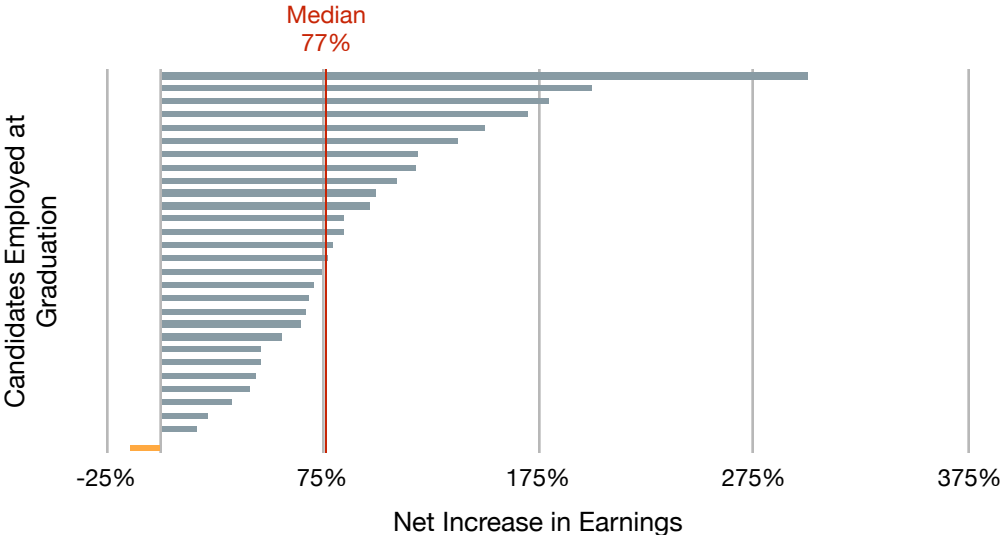
Students are assumed to forgo one-year of earning, even though the MSA program is 10-months in duration. The payback calculation does not take into consideration interest incurred by students who borrow to finance their education.

ESTIMATED NET INCREASE IN EARNINGS FOR ALL CANDIDATES, RANK ORDERED



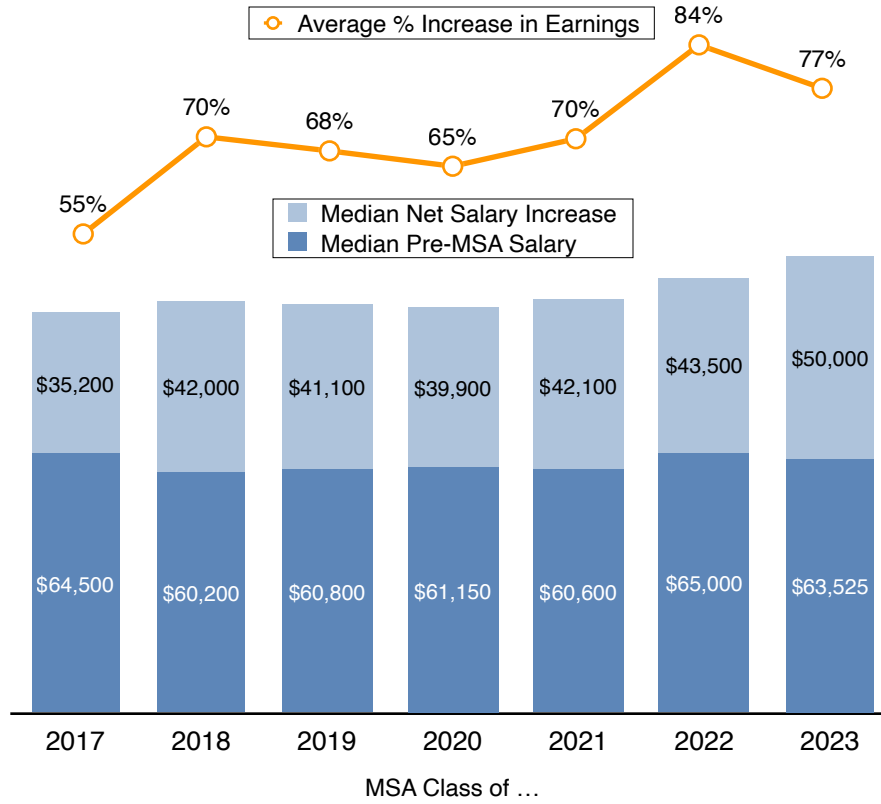
Note: The net increase in earnings is calculated for candidates with no prior work experience using inputted data for the median earnings reported by university graduates in May 2022 (\$66,250). Source: Institutional Strategy and Analysis, May 2022 Undergraduate Future Plans Survey: All Respondents Overview, NC State University.

ACTUAL NET INCREASE IN EARNINGS FOR CANDIDATES WITH PRIOR EMPLOYMENT, RANK ORDERED

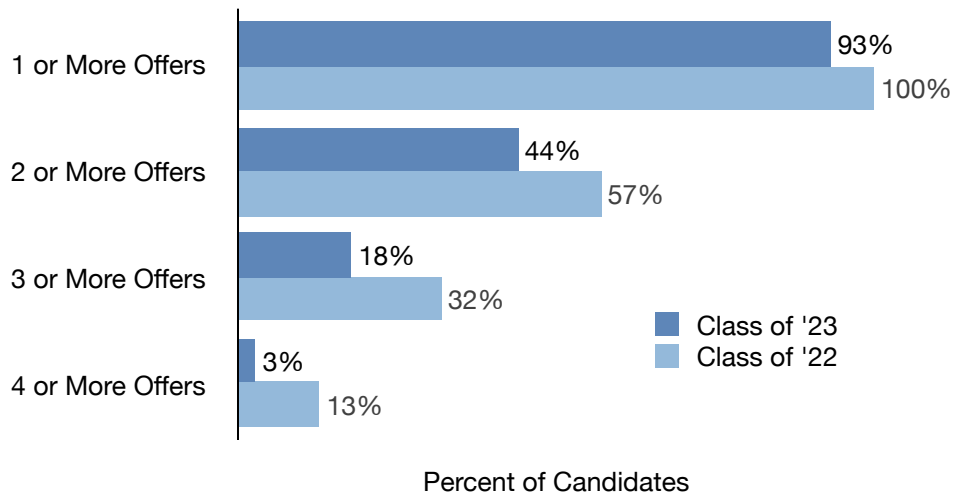


NET INCREASE IN EARNINGS FOR PREVIOUSLY EMPLOYED CANDIDATES

(domestic employment only)



NUMBER OF JOB OFFERS RECEIVED BY GRADUATION



COMPENSATION BY INDUSTRY SECTOR

	ANNUAL BASE SALARY				
	All Sectors	Consulting	Financial	Technology	Other
Mean	\$113,500	\$108,300	\$116,200	*	\$110,800
Maximum	\$155,000	\$125,000	\$143,500	*	\$155,000
75th Percentile	\$120,000	\$115,000	\$120,000	*	\$118,000
Median	\$116,500	\$110,000	\$120,000	*	\$105,000
25th Percentile	\$104,375	\$100,000	\$110,000	*	\$100,000
Minimum	\$87,500	\$87,500	\$90,000	*	\$95,000
N	80	17	48	2	13
% of Total	100%	21%	60%	3%	16%

COMPENSATION BY GEOGRAPHIC REGION

	ANNUAL BASE SALARY				
	North Carolina	U.S. Census Regions Outside North Carolina			
		South	Northeast	Midwest	West
Mean	\$111,550	\$109,700	\$128,200	\$119,600	*
Maximum	\$130,000	\$155,000	\$135,000	\$143,500	*
75th Percentile	\$120,000	\$113,750	\$135,000	\$120,000	*
Median	\$117,500	\$109,000	\$125,000	\$120,000	*
25th Percentile	\$105,000	\$100,000	\$125,000	\$117,250	*
Minimum	\$87,500	\$95,000	\$120,000	\$100,000	*
N	42	22	8	8	0
% of Total	53%	52%	19%	19%	0%

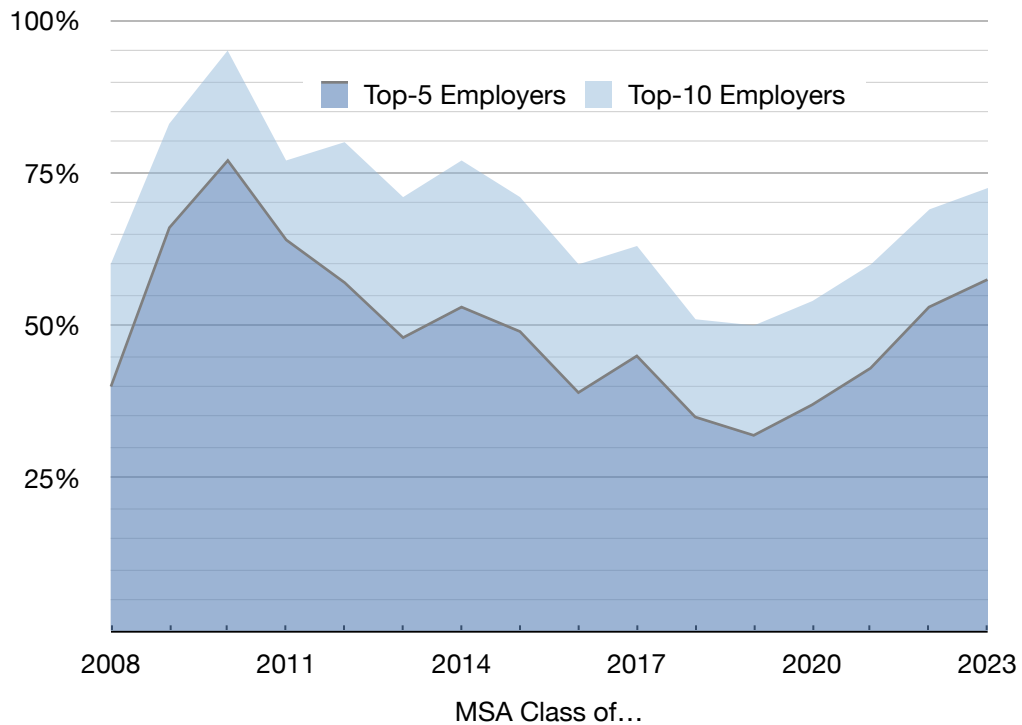
Geographic distribution is based on the location of the employer office, which may be different from the location of the candidate due to the increasing commonality of remote work.

EMPLOYMENT BY RESIDENCY STATUS PRIOR TO ADMISSION

	Percent of Candidates Employed		Subtotal
	Inside North Carolina	Outside North Carolina	
Non-Resident	10%	28%	38%
NC Resident	45%	18%	63%
Subtotal	55%	45%	100%

Graduates with remote work arrangements are classified by their state of residence, not the employer location.

PLACEMENT CONCENTRATION AMONG THE TOP-5 AND TOP-10 EMPLOYERS



COMPENSATION BY CITIZENSHIP STATUS AND WORK EXPERIENCE

	ANNUAL BASE SALARY			
	All Candidates		3+ Years Work Experience	
	Domestic	International	Domestic	International
Mean	\$111,900	\$121,500	\$113,200	\$126,700
Maximum	\$143,500	\$155,000	\$135,000	\$155,000
75th Percentile	\$120,000	\$130,000	\$120,000	\$130,000
Median	\$115,000	\$125,000	\$115,000	\$125,000
25th Percentile	\$101,250	\$110,000	\$110,000	\$120,000
Minimum	\$87,500	\$95,000	\$87,500	\$105,000
N	67	13	18	9
% of Total			27%	69%

Compared to domestic students, a greater proportion of international students enter the program with 3 or more years of prior work experience, and are more open to relocate when seeking employment upon graduation.

COHORT DISTRIBUTION BY CITIZENSHIP STATUS AND PRIOR WORK EXPERIENCE

	Percent of Candidates Employed		Subtotal
	<3 Years Work Experience	3+ Years Work Experience	
Domestic	60%	22%	82%
International	4%	13%	18%
Subtotal	64%	36%	100%

Domestic students include U.S. citizens and permanent residents.

RECRUITING TIMETABLE	
New cohort arrives:	June
Admissions Report with class demographics published:	July 1
Student roster available on Institute web site:	July 15
Employer information sessions begin in:	September 15
Student Profiles published:	October 1
Student Resume Book sent to employers:	December 1
Job interviews begin in:	January
Student job decision date:	March 1
Graduation in the first week of:	May
Employment Report published:	May 15
Candidates typically begin employment by the first week of:	June
Open job positions can be circulated to MSA alumni:	Upon receipt
MSA recruitment is managed entirely by the Institute as a service provided free of charge as a courtesy to employers.	

DISCLAIMER

The Institute has a proven track record for placing graduates in the analytics profession, but it does not under any circumstance offer a guarantee of employment upon degree completion.

DIRECTOR'S CERTIFICATION

The report of employment outcomes referred to above present fairly, in all material respects, the employment of the Institute's students at graduation as of May 19, 2023 in conformity with principles generally accepted among universities in the United States of America.

May 20, 2023

Date



Dr. Michael Rappa

Source URL: <http://analytics.ncsu.edu/reports/employment/MSA2023.pdf>

NC STATE UNIVERSITY