## MASTER OF SCIENCE IN ANALYTICS

## 2022 EMPLOYMENT REPORT

| Number of graduates (94\% completion rate): | 115 |
| :--- | :---: |
| Number of graduates seeking new employment: | 115 |
| Candidates employed at graduation: | 115 |
| Placement rate at graduation: | $100 \%$ |
| Average base salary: | $\$ 107,900$ |
| Median base salary: | $\$ 112,500$ |
| Number of employers interviewing: | 151 |
| Number of employers hiring one or more candidates: | 44 |
| Total number of reported job offers: | 244 |
| Job placements facilitated by the Institute: | $97 \%$ |
| Median net increase in earnings: | $74 \%$ |
| Median ROI payback period (in months): | 20 |
| Job placements based in North Carolina: | $60 \%$ |
| Job placements based in U.S.: | $100 \%$ |
| Candidates reporting salary data: | $100 \%$ |
| Placement results for Class of 2022 reported upon graduation, May | $26,2022$. |
|  |  |

## SELECTED POSITIONS FILLED

| Advanced Analytics Associate Consultant | Financial Modeling Analyst |
| :--- | :--- |
| Associate | Growth Marketing Associate |
| Associate Consultant | Marketing Analytics Lead |
| Audit Supervisor, Data Quality \& Analytics | Product Services Engineer |
| Business Analyst | Quantitative Solutions Associate |
| Business Intelligence Analyst | Senior Analyst |
| Business Intelligence Consultant | Senior Associate Analytical Consultant |
| Consultant | Senior Associate Solutions Advisor |
| Data Analyst | Senior Associate Systems Engineer |
| Data Analyst Consultant | Senior Business Analyst |
| Data Engineer | Senior Consultant |
| Data Scientist | Senior Data Scientist |
| Data Scientist Consultant | Senior Quantitative Analyst |
| Data Scientist Senior Associate | Systems Engineer |
| Data Scientist Senior Consultant | Technical Solutions Architect |

MAJOR TYPES OF POSITIONS AND AVERAGE BASE SALARIES


COMPENSATION BY EXPERIENCE LEVEL

|  | ANNUAL BASE SALARY |  |  |  | SIGNING BONUS |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Prior Work Experience |  |  |  |
|  |  | None | 1-2 Years | 3+ Years |  |
| Mean | \$107,900 | \$101,300 | \$112,600 | \$112,600 | \$11,700 |
| Maximum | \$135,000 | \$133,900 | \$135,000 | \$130,000 | \$26,000 |
| 75th <br> Percentile | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$15,000 |
| Median | \$112,500 | \$100,000 | \$120,000 | \$117,500 | \$10,125 |
| $\begin{array}{r} \text { 25th } \\ \text { Percentile } \end{array}$ | \$95,000 | \$91,275 | \$107,000 | \$102,750 | \$10,000 |
| Minimum | \$65,000 | \$65,000 | \$83,000 | \$85,000 | \$1,000 |
| N | 115 | 48 | 29 | 38 | 76 |
| \% Reporting | 100\% | 42\% | 25\% | 33\% | 66\% |

Notes: Data with respect to salaries and bonuses are self-reported by graduates (without anonymity) and whenever possible verified by employers in cases where placement is arranged by the Institute (i.e., most candidates). Two graduates will enter a paid, employersponsored training program for one year before entering regular full-time employment. All other 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. Conditional job offers (i.e., those requiring security clearance prior to employment) are not included in salary data. As a STEM-qualified degree, international MSA graduates are eligible for Optional Practical Training (OPT). Commencement is typically held on the first Saturday in May, and data are reported each year on or about May 15 for consistency.

DISCLAIMER: The Institute has 15-year proven track record having placed over 1,200 (99\%) of its graduates in full-time professional positions with 90 days of graduation, but it does not under any circumstance offer a guarantee of employment upon completion of the degree.

## EMPLOYERS

( $n=65$; with 44 employers succeeding in hiring one or more candidates)

| Accenture AI | Intrinio |
| :--- | :--- |
| Advance Auto Parts | Jacksonville Jaguars |
| Ally | JPMorgan Chase* |
| Ankura | JustAnswer |
| Arkatechture | KPMG |
| Asurion | LEK Consulting |
| Bank of America | LendingTree |
| Beghou Consulting | Live Oak Bank |
| Booz Allen Hamilton | Mack Trucks |
| Cadient Talent | MetLife |
| Camping World | NextEra Analytics |
| Cape Fear Collective | Pendo* |
| Celonis | PenFed Credit Union** |
| Choice Hotels | PNC |
| Cigna | Primer Labs |
| Cincinnati Reds | Red Hat* |
| Cisco | Red Ventures |
| Credit Karma | RTI International |
| Daimler Trucks | SAS* |
| Dataiku | State Employee's Credit Union |
| DISH Network | Siemens Healthineers |
| Elder Research | State Farm |
| Elevate Credit** | Targetbase |
| EY* | The Home Depot |
| Fidelity Investments | The Walt Disney Company |
| Fifth Third Bank* | Torc Robotics |
| FRG* | Truist |
| GoDaddy | UNC/Rex Healthcare |
| GRA | Verizon |
| Guidehouse* | Visionist |
| Humana | Wellmark |
| IBM |  |
| Institute for Medical Research 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 | $\$ 107,900$ | $\$ 113,700$ | $\$ 96,600$ | $\$ 96,750$ | $\$ 97,700$ |  |
| Maximum | $\$ 135,000$ | $\$ 135,000$ | $\$ 125,000$ | $\$ 125,000$ | $\$ 120,000$ |  |
| 75th Percentile | $\$ 120,000$ | $\$ 120,000$ | $\$ 105,000$ | $\$ 105,100$ | $\$ 102,500$ |  |
| Median | $\$ 112,500$ | $\$ 120,000$ | $\$ 100,000$ | $\$ 93,500$ | $\$ 97,500$ |  |
| 25th Percentile | $\$ 95,000$ | $\$ 107,000$ | $\$ 85,000$ | $\$ 85,000$ | $\$ 93,000$ |  |
| Minimum | $\$ 65,000$ | $\$ 75,000$ | $\$ 65,000$ | $\$ 85,000$ | $\$ 80,000$ |  |
| N | 115 | 75 | 13 | 16 | 11 |  |
| \% of Total | $100 \%$ | $65 \%$ | $11 \%$ | $14 \%$ | $10 \%$ |  |

COMPENSATION BY AGE AND GENDER

|  | ANNUAL BASE SALARY |  |  |  |  |  |  |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All | Age Brackets |  |  | Gender |  |  |
|  |  | $25-29$ | $30+$ | Men | Women |  |  |
| Mean |  | $\$ 103,700$ | $\$ 112,900$ | $\$ 109,800$ | $\$ 107,600$ | $\$ 108,400$ |  |
| Maximum | $\$ 135,000$ | $\$ 133,900$ | $\$ 130,000$ | $\$ 135,000$ | $\$ 135,000$ | $\$ 130,000$ |  |
| 75th Percentile | $\$ 120,000$ | $\$ 120,000$ | $\$ 120,000$ | $\$ 120,000$ | $\$ 120,000$ | $\$ 120,000$ |  |
| Median | $\$ 112,500$ | $\$ 105,000$ | $\$ 117,500$ | $\$ 112,500$ | $\$ 112,500$ | $\$ 116,250$ |  |
| 25th Percentile | $\$ 95,000$ | $\$ 92,000$ | $\$ 105,000$ | $\$ 100,000$ | $\$ 95,000$ | $\$ 99,375$ |  |
| Minimum | $\$ 65,000$ | $\$ 65,000$ | $\$ 83,000$ | $\$ 85,000$ | $\$ 75,000$ | $\$ 65,000$ |  |
| N | 115 | 57 | 41 | 17 | 75 | 40 |  |
| \% of Total | $100 \%$ | $50 \%$ | $36 \%$ | $15 \%$ | $65 \%$ | $35 \%$ |  |



HISTORICAL TREND IN 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

\$150,000


## STUDENT RETURN ON INVESTMENT

|  | NC Resident | Non-Resident |
| :---: | :---: | :---: |
| Number of Respondents | 35 | 22 |
| Pre-MSA Salary Median | $\$ 67,300$ | $\$ 54,500$ |
| $(+)$ Tuition \& Fees | $\$ 27,400$ | $\$ 50,500$ |
| $(-)$ Signing Bonus | $\$ 15,000$ | $\$ 10,000$ |
| Total Investment | $\$ 79,700$ | $\$ 95,000$ |
| Post MSA Salary Median | $\$ 120,000$ | $\$ 113,750$ |
| (-) Pre-MSA Salary | $\$ 67,300$ | $\$ 54,500$ |
| Net Salary Increase | $\$ 52,700$ | $\$ 59,250$ |
| Payback Period (months) | 18 | 19 |
| Net Increase in Earnings | $78 \%$ | $109 \%$ |
| Pration |  |  |

Based on graduates with full-time domestic employment prior to program entry. The median net increase in salary for the 59 graduates was $\$ 65,000$.

## PAYBACK PERIOD CALCULATION

$\underset{\text { (in months) }}{\text { Payback Period }}=\frac{\text { (Pre-MSA Salary + Tuition) }- \text { Signing Bonus }}{\text { Post-MSA Salary }- \text { Pre-MSA Salary }} \quad \times 12$
Notes: Respondents provided information about their pre- and post-MSA annual base salaries, signing bonuses, and residency status (which determines tuition payments). The median salary increase was $\$ 42,500$; all but one respondent reported an increase in salary. The ROI payback period is calculated for each candidate employed by graduation, based on their individual circumstances (residency, tuition, pre- and postsalaries, and signing bonuses)..

Students are assumed to forgo one-year of earning, even though the MSA program is only 10-months in duration. Pre-MSA salary interquartile range was from $\$ 50,000$ to $\$ 74,375$. The payback calculation does not take into consideration interest incurred by students who borrow to finance their education.

## NET INCREASE IN EARNINGS FOR CANDIDATES EMPLOYED AT GRADUATION, RANK ORDERED



Note: The net increase in earnings is calculated for candidates with no prior work experience using inputed data for the median earnings reported by university graduates in May $2021(\$ 57,400)$. Source: Institutional Strategy and Analysis, May 2021 Undergraduate Future Plans Survey: All Respondents Overview, NC State University.

## NET INCREASE IN EARNINGS FOR PREVIOUSLY EMPLOYED CANDIDATES



## NUMBER OF JOB OFFERS RECEIVED BY GRADUATION



Percent of Candidates

## COMPENSATION BY INDUSTRY SECTOR

|  | ANNUAL BASE SALARY |  |  |  |  |  |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All Sectors | Consulting | Financial | Technology | Other |  |
| Mean | $\$ 107,900$ | $\$ 100,500$ | $\$ 114,300$ | $\$ 103,400$ | $\$ 96,300$ |  |
| Maximum | $\$ 135,000$ | $\$ 125,000$ | $\$ 135,000$ | $\$ 133,900$ | $\$ 120,000$ |  |
| 75th Percentile | $\$ 120,000$ | $\$ 114,500$ | $\$ 120,000$ | $\$ 107,000$ | $\$ 108,500$ |  |
| Median | $\$ 112,500$ | $\$ 95,000$ | $\$ 120,000$ | $\$ 102,500$ | $\$ 102,000$ |  |
| 25th Percentile | $\$ 95,000$ | $\$ 85,750$ | $\$ 117,500$ | $\$ 95,000$ | $\$ 85,000$ |  |
| Minimum | $\$ 65,000$ | $\$ 85,000$ | $\$ 80,000$ | $\$ 81,000$ | $\$ 65,000$ |  |
| N | 115 | 22 | 58 | 28 | 7 |  |
| \% of Total | $100 \%$ | $19 \%$ | $50 \%$ | $24 \%$ | $6 \%$ |  |

## COMPENSATION BY GEOGRAPHIC REGION

|  |  | AN | AL BASE S | RY |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | U.S. | sus Regions | tside North | olina |
|  | Carolina | South | Northeast | Midwest | West |
| Mean | \$106,000 | \$108,100 | \$115,200 | \$110,900 | * |
| Maximum | \$133,900 | \$135,000 | \$130,000 | \$120,000 | * |
| 75th Percentile | \$120,000 | \$120,000 | \$120,000 | \$120,000 | * |
| Median | \$107,500 | \$110,000 | \$120,000 | \$117,500 | * |
| 25th Percentile | \$93,000 | \$100,000 | \$107,000 | \$113,125 | * |
| Minimum | \$80,000 | \$65,000 | \$90,000 | \$75,000 | * |
| N | 66 | 26 | 14 | 8 | 1 |
| \% of Total | 57\% | 23\% | 12\% | 7\% | 1\% |
| 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 |  |  |
| ---: | :---: | :---: | :---: |
|  | Inside <br> North Carolina | Outside <br> North Carolina | Subtotal |
| Non-Resident | $12 \%$ | $18 \%$ | $31 \%$ |
| NC Resident | $45 \%$ | $25 \%$ | $69 \%$ |
| Subtotal | $57 \%$ | $43 \%$ | $100 \%$ |

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



## 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 beginn in: | September |
| 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 15, 2022 in conformity with principles generally accepted among universities in the United States of America.

May 26, 2022
Date


Source URL: http://analytics.ncsu.edu/reports/employment/MSA2022.pdf

NC STATE UNIVERSITY

