# Employment Outcomes Summary

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of graduates:</td>
<td>113</td>
</tr>
<tr>
<td>Number of graduates seeking new employment:</td>
<td>109</td>
</tr>
<tr>
<td>Candidates with one or more offers by graduation:</td>
<td>99%</td>
</tr>
<tr>
<td>Candidates placed by graduation:</td>
<td>95%</td>
</tr>
<tr>
<td>Number of employers interviewing (on site):</td>
<td>166 (43)</td>
</tr>
<tr>
<td>Median number of initial job interviews per candidate:</td>
<td>10</td>
</tr>
<tr>
<td>Median number of offers of employment per candidate:</td>
<td>2</td>
</tr>
<tr>
<td>Job placements facilitated by the Institute:</td>
<td>90%</td>
</tr>
<tr>
<td>Estimated ROI payback period in months:</td>
<td>22</td>
</tr>
<tr>
<td>Total number of reported job offers:</td>
<td>280</td>
</tr>
<tr>
<td>Job placements based in North Carolina:</td>
<td>44%</td>
</tr>
<tr>
<td>Job placements based in U.S.:</td>
<td>100%</td>
</tr>
<tr>
<td>Candidates reporting job offer data:</td>
<td>99%</td>
</tr>
</tbody>
</table>

Placement results for Class of 2016 reported as of May 15, 2016.

For further information about recruiting contact: analytics@ncsu.edu
POSITIONS FILLED – MSA CLASS OF 2016

Advanced Analytics Data Scientist
Analyst, Product Analytics
Analytic Methodologist
Analytics Consultant
Analytics Professional
Associate Consultant
Associate Data Scientist (2)
Business Data Scientist (3)
Clinical & Business Intelligence Developer
Co-Founder
Consultant (6)
Data Scientist (20)
Data Scientist Analyst (2)
Digital Analyst
Engineer (3)
Experienced Associate
Finance Associate
Forecasting Analyst
Industry Consultant
Informatics Analyst (2)
Integration Consultant
Manager, Consumer/Guest Research Analysis
Marketing Analytics Analyst
Marketing Optimization Associate
Model Risk Analytics Analyst
Operations Research / Systems Analyst
Operations Research Analyst
Quality Analyst
Quantitative Finance Analyst (2)
Quantitative Risk Analyst (4)
Risk Analyst
Senior Analyst Risk Consultant
Senior Analyst, Direct to Consumer
Senior Analyst, Supply Chain (2)
Senior Analyst, Supply Chain Development
Senior Analytics Consultant
Senior Associate Analytical Consultant (7)
Senior Associate Analytical Systems Eng. (5)
Senior Associate Technical Consultant (2)
Senior Associate, Marketing Optimization (2)
Senior Consultant (4)
Senior Data Analyst
Senior Data Analyst, Supply Chain
Senior Data Scientist
Senior Enterprise Intelligence Analyst
Senior Financial Analyst (3)
Senior Informatics Analyst (2)
Senior Quantitative Finance Analyst
Senior Statistical Analyst
Specialist, Global Advanced Analytics
Solutions Specialist
Staff Consultant (3)
Technical Account Manager
Technical Architect
Technology Consultant

MAJOR TYPES OF POSITIONS
MSA CLASS OF 2016

- 27%
- 35%
- 9%

Analyst
Data Scientist
Consultant
Developer / Engineer
Manager / Entrepreneur
### COMPENSATION – MSA CLASS OF 2016

<table>
<thead>
<tr>
<th></th>
<th>ANNUAL BASE SALARY</th>
<th>SIGNING BONUS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Prior Work Experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>Mean</td>
<td>$93,250</td>
<td>$88,600</td>
</tr>
<tr>
<td>Median</td>
<td>$90,000</td>
<td>$85,000</td>
</tr>
<tr>
<td>75th Percentile</td>
<td>$100,000</td>
<td>$92,000</td>
</tr>
<tr>
<td>25th Percentile</td>
<td>$85,000</td>
<td>$85,000</td>
</tr>
<tr>
<td>Maximum</td>
<td>$130,000</td>
<td>$120,000</td>
</tr>
<tr>
<td>Minimum</td>
<td>$67,000</td>
<td>$70,000</td>
</tr>
<tr>
<td>N</td>
<td>104</td>
<td>49</td>
</tr>
<tr>
<td>% Reporting</td>
<td>100%</td>
<td>47%</td>
</tr>
</tbody>
</table>

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). Four graduates in 2016 did not seek new employment: all returned to a sponsoring employer. Student job placements are full-time paid positions without exception; the Institute does not place students in part-time, internship, or pro bono work. Data are made public here to guide prospective students and employers. Annual base salary figures do not include signing bonuses, relocation allowances or other forms of one-time compensation guaranteed upon signing. Conditional job offers (i.e., those requiring security clearance prior to employment) or other public sector employment are not included in the 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. 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 completion of the MSA degree.
EMPLOYERS EXTENDING OFFERS
MSA CLASS OF 2016

Abercrombie & Fitch (Columbus, OH)
Accenture (Washington, DC)
Advanced Auto Parts (Raleigh, NC)
Ankura Consulting (Washington, DC)
B2W (Cambridge, MA)
Bank of America (Charlotte, NC)
BB&T (Winston-Salem, NC)
Blue Cross Blue Shield NC (Durham, NC)
Bain & Company (Atlanta, GA)
Booz Allen Hamilton (Washington, DC)
Boston Consulting Group (Boston, MA)
Cargill (Minneapolis, MN)
Cognizant (Teaneck, NJ)
Community Care of NC (Raleigh, NC)
Conclusive Analytics (Charlotte, NC)
CoreCompete LLC (Durham, NC)
Deloitte (Atlanta, GA; Charlotte, NC; Chicago, IL; Dallas, TX)
Disney (Orlando, FL)
Dollar Tree (Chesapeake, VA)
Elder Research (Washington, DC)
Elevate (Ft. Worth, TX; San Diego, CA)
Elicit, LLC (Austin, TX)
EY (Charlotte, NC; New York, NY)
Financial Risk Group (Cary, NC)
First Class Technology (Chicago, IL)
Florida Blue (Jacksonville, FL)
General Motors (Warren, MI)
Home Depot (Atlanta, GA)
Humana (Chicago, IL)
IBM (Lanham, MD; RTP, NC)
InterWorks (Omaha, NE)
JP Morgan Chase (Columbus, OH)
Liberty Healthcare (Raleigh, NC)
Liberty Mutual (Boston, MA)
Lowe's Companies (Mooresville, NC)
M&T Bank (Buffalo, NY)
Magnify Analytics (Detroit, MI)
Marriott International (Bethesda, MD)
McKinsey (Boston, MA)
MDA Information Sys. (Gaithersburg, MD)
Mission Health (Asheville, NC)
Monumental Sports Entertainment / Washington Wizards (Washington, DC)
Nike (Portland, OR)
Northrop Grumman (Melbourne, FL)
Pitt County Government, NC
Premier (Charlotte, NC)
Progressive Leasing (Salt Lake City, UT)
Putnam Investments (Boston, MA)
PwC (McLean, VA)
Red Hat (Raleigh, NC)
RTI International (RTP, NC)
SAS (Cary, NC)
Teradata (San Diego, CA)
The J.M. Smucker Company (Orrville, OH)
United Airlines (Chicago, IL)
Universal Resorts (Orlando, FL)
US Bank (Charlotte, NC)
Visionist (Columbia, MD)
Zencos (Cary, NC)
Zions Bank (Salt Lake City, UT)

Bold = employers that succeeded in hiring one or more candidates.
List does not include federal government agencies.
### COMPENSATION BY GEOGRAPHIC REGION – MSA CLASS OF 2016

<table>
<thead>
<tr>
<th></th>
<th>North Carolina</th>
<th>Geographic Region Outside North Carolina</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
</tr>
<tr>
<td></td>
<td>$90,200</td>
<td>$85,000</td>
</tr>
<tr>
<td></td>
<td>$93,100</td>
<td>$92,000</td>
</tr>
<tr>
<td></td>
<td>$108,000</td>
<td>$105,000</td>
</tr>
<tr>
<td></td>
<td>$91,100</td>
<td>$90,000</td>
</tr>
<tr>
<td></td>
<td>$97,000</td>
<td>$93,000</td>
</tr>
<tr>
<td>75th Percentile</td>
<td>$95,000</td>
<td>$95,750</td>
</tr>
<tr>
<td>25th Percentile</td>
<td>$85,000</td>
<td>$85,300</td>
</tr>
<tr>
<td>Maximum</td>
<td>$130,000</td>
<td>$125,000</td>
</tr>
<tr>
<td>Minimum</td>
<td>$70,000</td>
<td>$70,000</td>
</tr>
<tr>
<td>N</td>
<td>48</td>
<td>16</td>
</tr>
</tbody>
</table>

### COMPENSATION BY INDUSTRY SECTOR – MSA CLASS OF 2016

<table>
<thead>
<tr>
<th></th>
<th>Consulting</th>
<th>Banking / Insurance</th>
<th>Retail</th>
<th>Software / Internet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>$89,900</td>
<td>$101,400</td>
<td>$93,000</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>$90,000</td>
<td>$102,000</td>
<td>$92,000</td>
</tr>
<tr>
<td></td>
<td>75th Percentile</td>
<td>$95,500</td>
<td>$115,000</td>
<td>$92,000</td>
</tr>
<tr>
<td></td>
<td>25th Percentile</td>
<td>$85,000</td>
<td>$90,000</td>
<td>$92,000</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>$125,000</td>
<td>$130,000</td>
<td>$110,000</td>
</tr>
<tr>
<td></td>
<td>Minimum</td>
<td>$70,000</td>
<td>$80,000</td>
<td>$85,000</td>
</tr>
<tr>
<td>N</td>
<td>31</td>
<td>26</td>
<td>10</td>
<td>28</td>
</tr>
</tbody>
</table>
DISTRIBUTION OF EMPLOYMENT OUTSIDE NORTH CAROLINA BY REGION – CLASS OF 2016

Mid-Atlantic
South
Northeast
Midwest
West

Number of Placements

DISTRIBUTION OF EMPLOYMENT BY INDUSTRY SECTOR – CLASS OF 2016

Consulting
Software / Internet
Banking / Insurance
Retail
Government / Military
Entertainment / Hospitality
Healthcare
Textiles / Apparel
Aerospace
Automotive
Transportation

Number of Placements
HISTORICAL TREND IN JOB PLACEMENT RATE
MSA CLASSES OF 2008 – 2016

Placed by Graduation

NUMBER OF JOB OFFERS RECEIVED BY GRADUATION
MSA CLASS OF 2016
Note: 98% of the MSA alumni community is employed in the U.S.

EMPLOYMENT BY RESIDENCY STATUS PRIOR TO ADMISSION
MSA CLASS OF 2016

<table>
<thead>
<tr>
<th></th>
<th>Number of Candidates Placed</th>
<th>Inside North Carolina</th>
<th>Outside North Carolina</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Resident</td>
<td></td>
<td>17</td>
<td>39</td>
<td>56</td>
</tr>
<tr>
<td>NC Resident</td>
<td></td>
<td>31</td>
<td>22</td>
<td>53</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>48</td>
<td>61</td>
<td>109</td>
</tr>
</tbody>
</table>

Includes candidates returning to a previous employer.
About the ROI Survey: An anonymous and voluntary survey was conducted over a 5-day period just prior to graduation. The response rate was 97-percent. Respondents provided information about their pre- and post-MSA annual base salaries, signing bonuses, and residency status (which determines tuition payments). Since the cost of attending differs by residency, the analysis is performed for both residents and non-residents separately. Fifty percent of respondents were NC residents, and 62-percent were employed full-time prior to entry. Ninety-five percent of respondents accepted full-time employment prior to graduation. All but one respondent reported an increase in salary after completing the MSA degree.

Students are assumed to forgo one-year of earning, even though the MSA program is only 10-months in duration. The average pre-MSA salary is estimated based on those candidates working full-time prior to entry in the program. Pre-MSA salaries ranged from $20,000 to $120,000.

The payback calculation does not take into consideration interest incurred by students who borrow to finance their education. Thirty-seven percent of students took on debt to pay tuition, borrowing a median of $29,500 at a median interest rate of 5.8-percent. The average ratio of starting base salary to debt was 3.1.

**STUDENT RETURN ON INVESTMENT – MSA CLASS OF 2016**

<table>
<thead>
<tr>
<th></th>
<th>NC Resident</th>
<th>Non-Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Respondents</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>Pre-MSA Salary Median*</td>
<td>$52,000</td>
<td>$49,500</td>
</tr>
<tr>
<td>(+) Tuition &amp; Fees</td>
<td>$25,000</td>
<td>$42,850</td>
</tr>
<tr>
<td>(–) Signing Bonus</td>
<td>$9,500</td>
<td>$10,000</td>
</tr>
<tr>
<td>Total Investment</td>
<td>$67,500</td>
<td>$82,350</td>
</tr>
<tr>
<td>Post MSA Salary Median</td>
<td>$90,000</td>
<td>$92,000</td>
</tr>
<tr>
<td>(–) Pre-MSA Salary</td>
<td>$52,000</td>
<td>$49,500</td>
</tr>
<tr>
<td>Net Salary Increase</td>
<td>$38,000</td>
<td>$42,500</td>
</tr>
<tr>
<td>Payback Period (months)</td>
<td>21</td>
<td>23</td>
</tr>
<tr>
<td>Net 3-Year ROI</td>
<td>$123,500</td>
<td>$137,500</td>
</tr>
</tbody>
</table>

*Based on graduates with full-time employment prior to program entry.

**PAYBACK PERIOD CALCULATION**

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

About the ROI Survey: An anonymous and voluntary survey was conducted over a 5-day period just prior to graduation. The response rate was 97-percent. Respondents provided information about their pre- and post-MSA annual base salaries, signing bonuses, and residency status (which determines tuition payments). Since the cost of attending differs by residency, the analysis is performed for both residents and non-residents separately. Fifty percent of respondents were NC residents, and 62-percent were employed full-time prior to entry. Ninety-five percent of respondents accepted full-time employment prior to graduation. All but one respondent reported an increase in salary after completing the MSA degree.

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<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>New cohort of 120 students arrives in:</td>
<td>June</td>
</tr>
<tr>
<td>Basic demographic profile of new cohort published by:</td>
<td>July 1</td>
</tr>
<tr>
<td>New student roster available on Institute web site by:</td>
<td>July 15</td>
</tr>
<tr>
<td>Employer information sessions hosted beginning first week of:</td>
<td>September</td>
</tr>
<tr>
<td><strong>Student Profile Book</strong> available on web site by:</td>
<td>October 1</td>
</tr>
<tr>
<td><strong>Student Resume Book</strong> sent to employers by:</td>
<td>December 1</td>
</tr>
<tr>
<td>On-site interviews begin second week of:</td>
<td>January</td>
</tr>
<tr>
<td>Student placement decision date before second week of:</td>
<td>March</td>
</tr>
<tr>
<td>Graduation date normally in the first week of:</td>
<td>May</td>
</tr>
<tr>
<td><strong>Employment Report</strong> published on web site by:</td>
<td>June 1</td>
</tr>
<tr>
<td>Candidates typically begin employment by the first week of:</td>
<td>June</td>
</tr>
<tr>
<td>Open job positions can be circulated to MSA alumni:</td>
<td>Upon receipt</td>
</tr>
</tbody>
</table>

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 completion of the MSA degree.

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, 2016 in conformity with principles generally accepted among universities in the United States of America.

Dr. Michael Rappa
Institute Director

Source URL: http://analytics.ncsu.edu/reports/employment/MSA2016.pdf

http://analytics.ncsu.edu

NC STATE UNIVERSITY