



Dr. Michael Rappa, Founding Director

## MASTER OF SCIENCE IN ANALYTICS

# 2017 BENCHMARK REPORT

Each year the Master of Science in Analytics (MSA) is benchmarked against leading MBA programs with comparably-sized enrollment on two-dozen metrics using publicly available data. Why MBA programs? Because too few analytics and data science programs publicly disclose student outcomes with the thoroughness and consistency needed to accurately benchmark. Also, the variation in cohort enrollment size and program formats make comparisons difficult.

MBA programs have a long history of reporting enrollment and outcomes data as a part of the annual ranking process conducted by organizations such as U.S. News. The data are reported under clear and consistent guidelines that make fair and accurate benchmarking possible. The Institute follows these guidelines in reporting results for the MSA program. Other analytics and data science programs are encouraged to do the same.

The rank order (and cohort size) of the top MBA programs and the requisite range for benchmark comparisons in 2017 (highlighted) are shown below.

- |                                 |  |
|---------------------------------|--|
| 1. Harvard / 934                | 17. UT-Austin (McCombs) / 260            |
| 1. Pennsylvania (Wharton) / 851 | 18. UNC (Kenan-Flagler) / 298            |
| 3. Chicago (Booth) / 586        | 19. Carnegie Mellon (Tepper) / 207       |
| 4. MIT (Sloan) / 409            | 20. Emory (Goizueta) / 181               |
| 4. Northwestern (Kellogg) / 474 | 21. Georgetown (McDonough) / 287         |
| 4. Stanford / 417               | 21. Indiana (Kelley) / 185               |
| 7. Berkeley (Haas) / 252        | 21. Washington St. Louis (Olin) / 128    |
| 8. Dartmouth (Tuck) / 285       | 24. Southern California (Marshall) / 228 |
| 9. Columbia / 558               | 25. Arizona State (Carey) / 119          |
| 9. Yale / 324                   | 25. Vanderbilt (Owen) / 175              |
| 11. Michigan (Ross) / 413       | 27. Ohio State (Fisher) / 92             |
| 12. Duke (Fuqua) / 446          | 27. Washington (Foster) / 125            |
| 12. New York (Stern) / 390      | 29. Georgia Tech (Scheller) / 80         |
| 14. Virginia (Darden) / 345     | 29. Rice (Jones) / 110                   |
| 15. UCLA (Anderson) / 361       | 29. Notre Dame (Mendoza) / 121           |
| 16. Cornell (Johnson) / 279     | 32. Minnesota (Carlson) / 104            |

The highest ranked MBA programs with similar cohort sizes to the MSA fall between 21st and 29th in the ranking. (The highest ranked MBA programs, 20th or above, have larger full-time cohorts in the range of 180-900 students.) Selected for comparison are the top-5 highest-ranked MBA programs with similar cohort sizes to the MSA program, enrolling between 110 and 130 students:

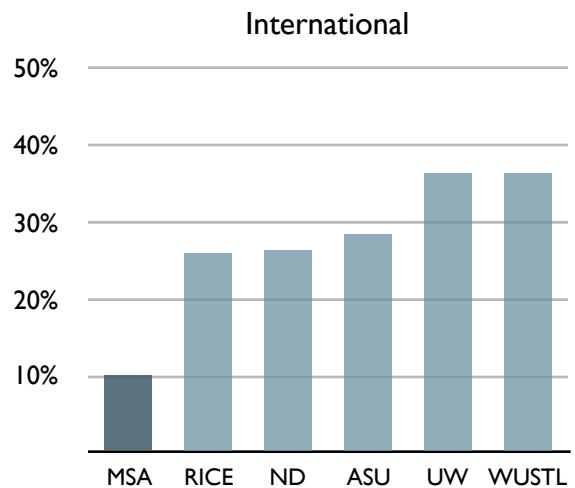
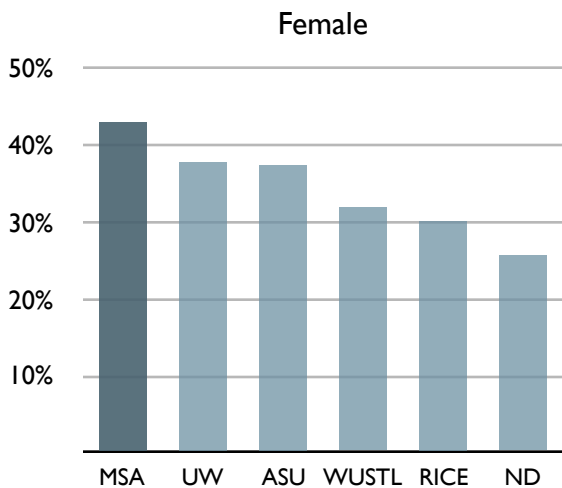
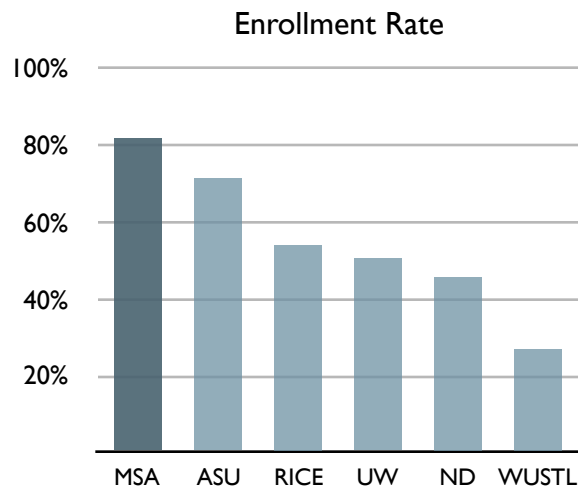
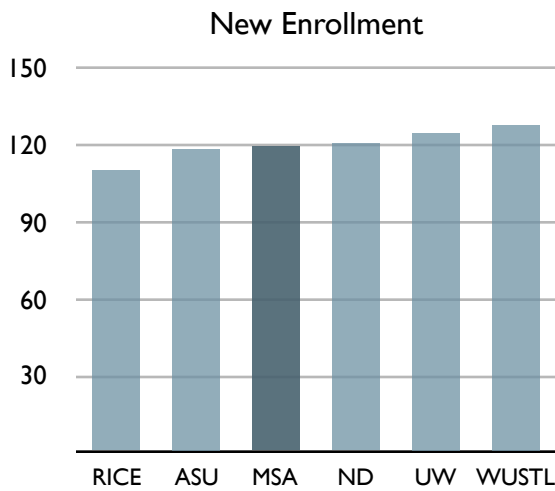
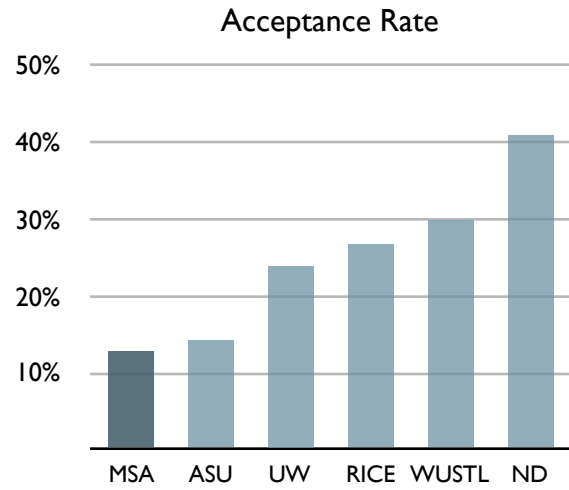
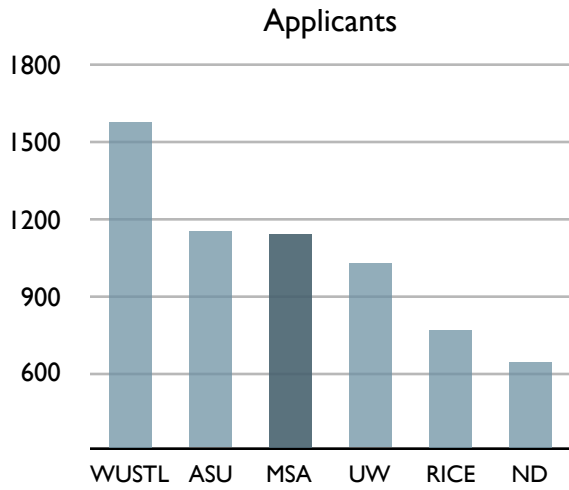
- 21. Washington University in St. Louis (WUSTL)
- 25. Arizona State University (ASU)
- 27. University of Washington (UW)
- 29. University of Notre Dame (ND)
- 29. Rice University (RICE)

The benchmark study is updated each year (in June) with the latest data from U.S. News. The schools used in this study may change from year to year based on the changes in the annual ranking or cohort sizes.

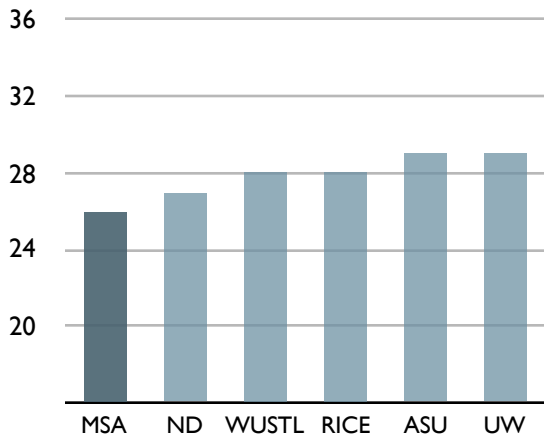
For more information on the U.S. News ranking of business schools, see: <https://www.usnews.com/best-graduate-schools/top-business-schools>

Based on the available data, the following metrics are used to benchmark the MSA against the top-5 comparably-sized MBA programs:

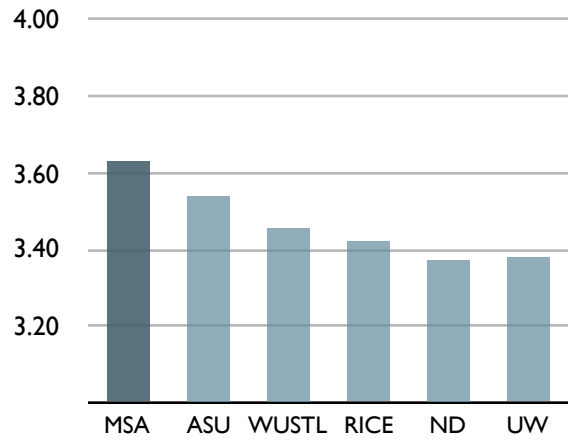
Number of Applicants	Average Base Salary
Acceptance Rate	% Reporting Salary Data
Enrollment	% Employed at Graduation
Enrollment Rate	% Employed 3-Months After Graduation
% Female Students	Signing Bonus
% International Students	% Receiving Signing Bonus
Length of Work Experience	Tuition and Fees
% Work Experience	Tuition and Fees – Residents
Age	Average Indebtedness
Undergraduate GPA	% Students with Debt
% Seeking Employment	ROI Payback Period
Number Seeking Employment	ROI Payback Period – Residents



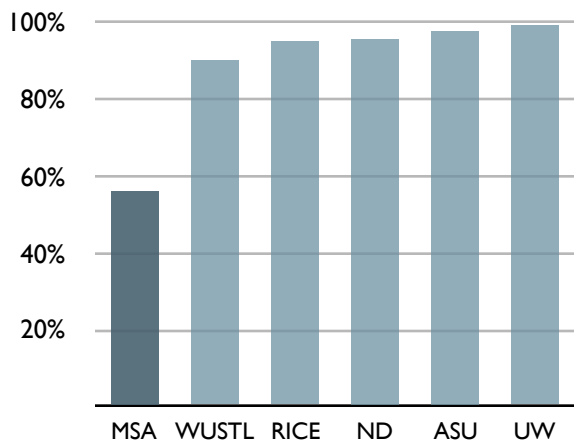
Average Age at Entry



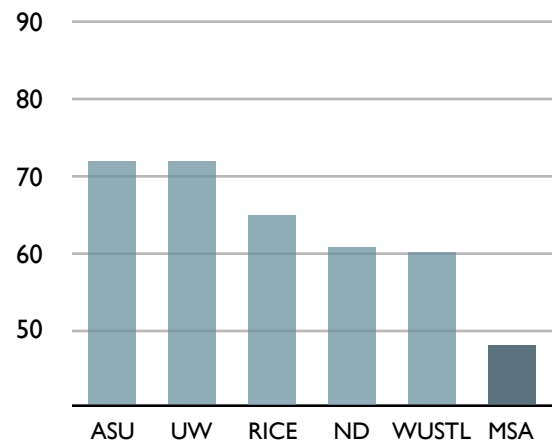
Undergraduate GPA



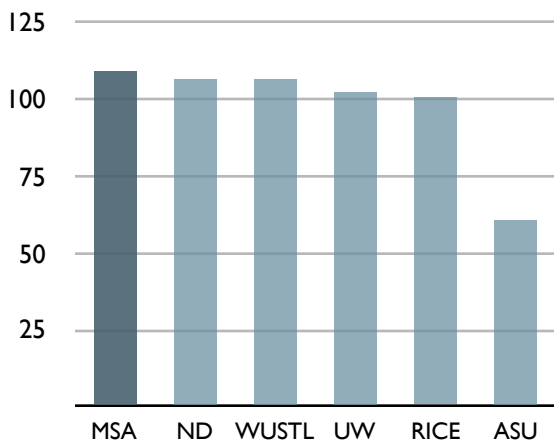
% with Prior Experience



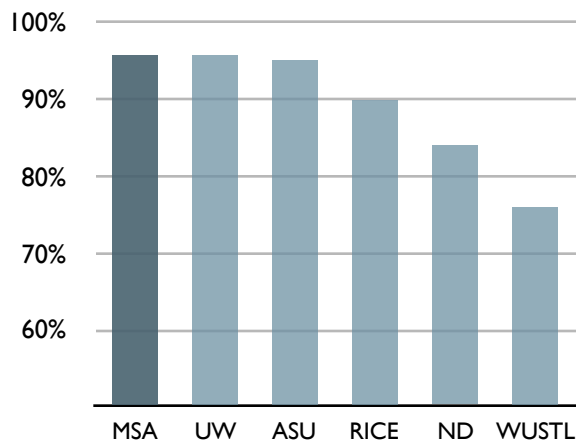
Average Prior Experience (months)



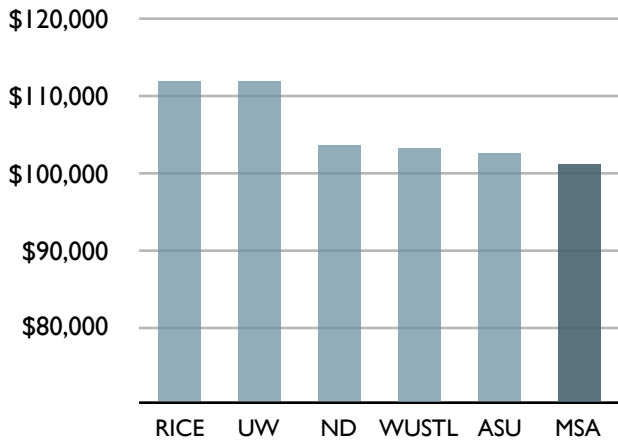
Graduates Seeking Employment



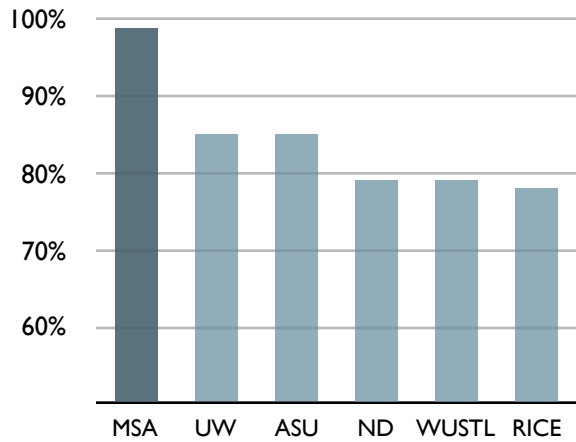
% Seeking Employment



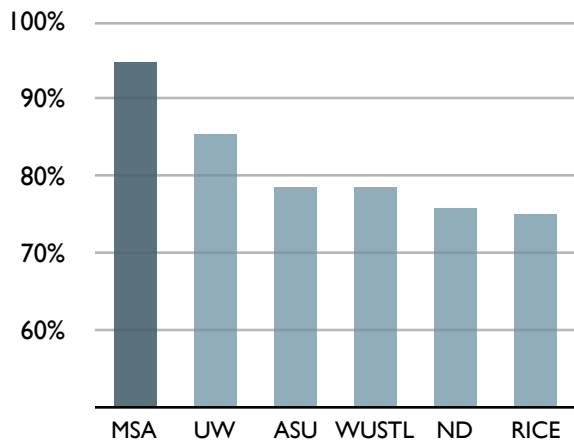
Average Base Salary



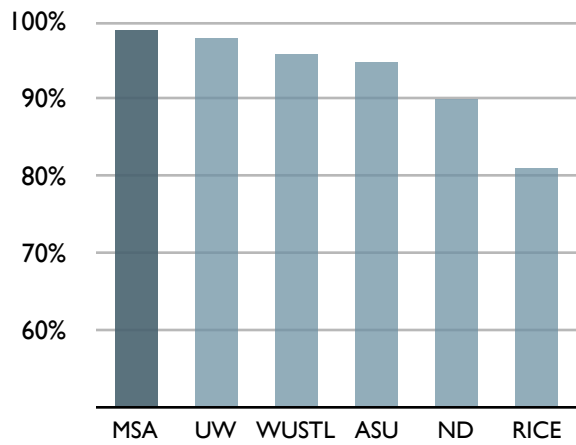
Graduates Reporting Salary Data



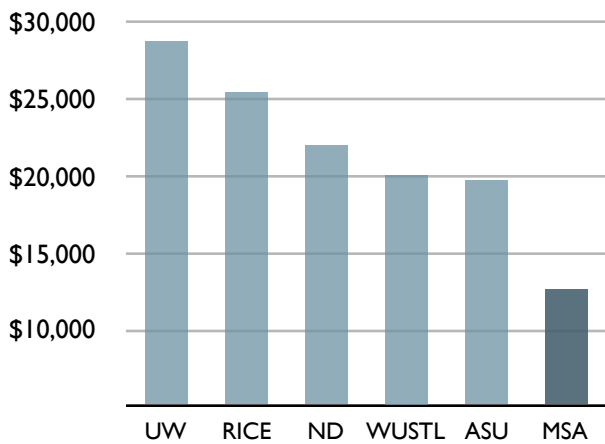
Employed at Graduation



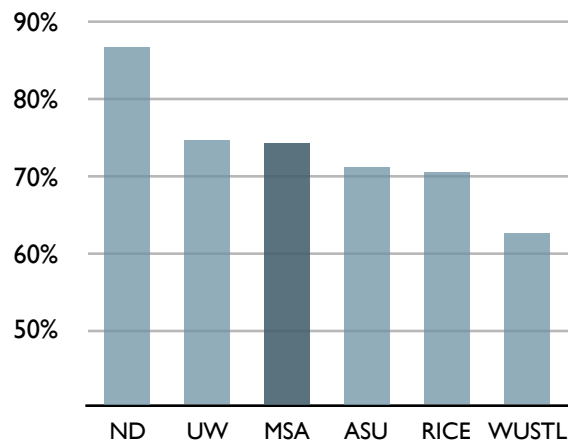
Employed 3-Months After



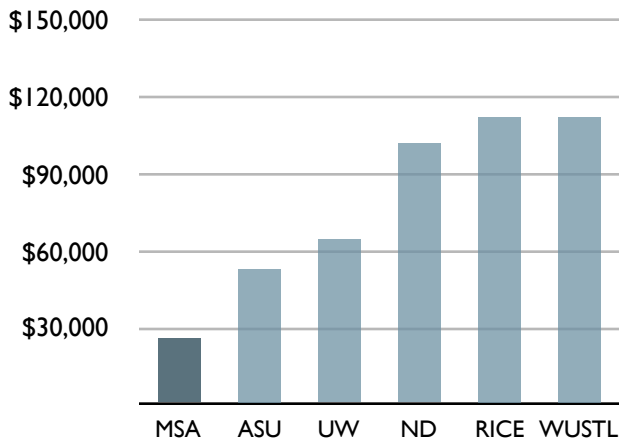
Average Signing Bonus



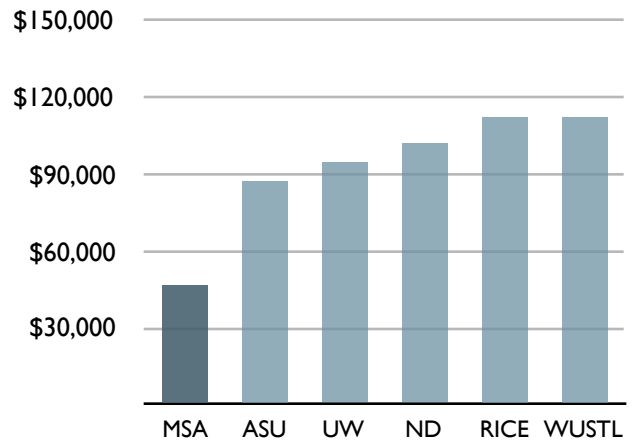
% Receiving Signing Bonus



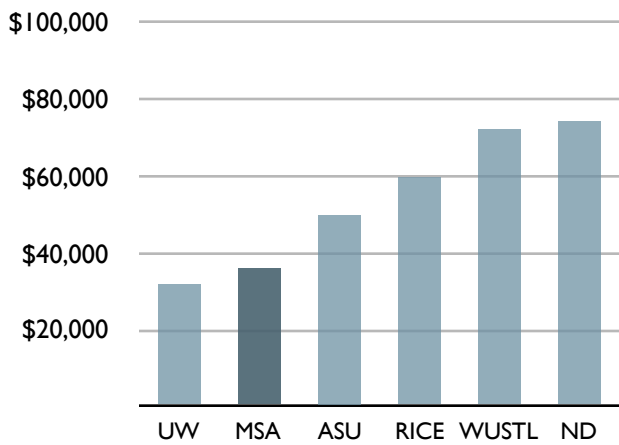
Resident Tuition & Fees



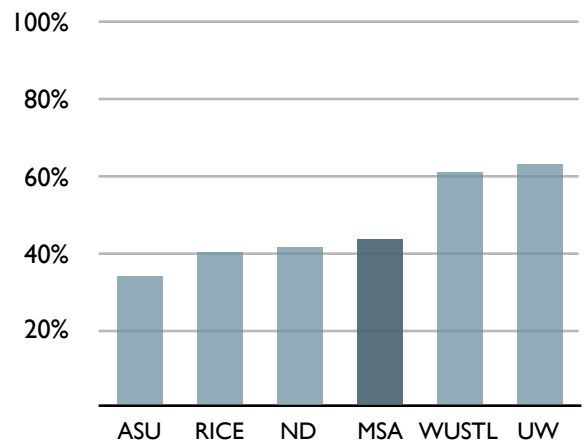
Non-Resident Tuition & Fees



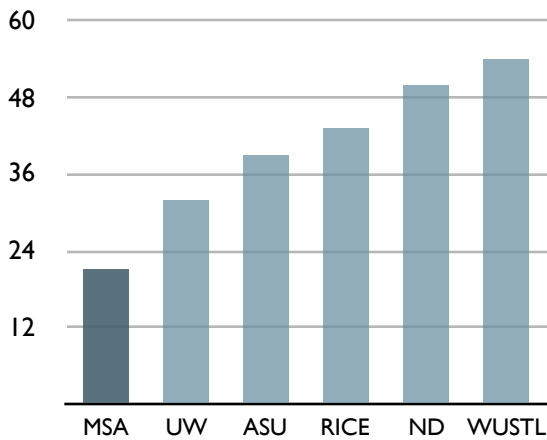
Average Indebtedness



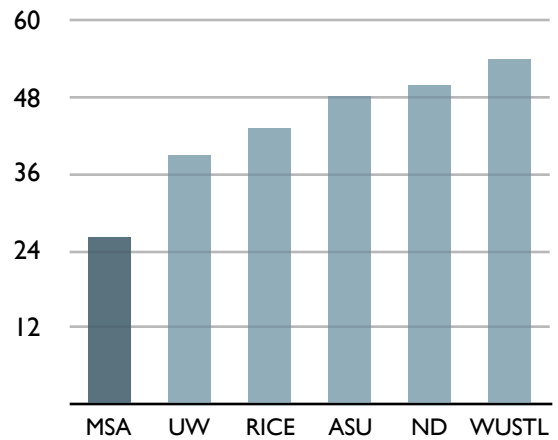
Graduates with Debt



Resident Payback Period (months)



Non-Resident Payback Period



	MSA	MBA PROGRAMS					
		AVG.	WUSTL	ASU	UW	RICE	ND
US News Rank (April 2017)	–	–	21	25	27	29	29
Number of Applicants	1140	1036	1579	1159	1032	764	647
Acceptance Rate	13%	27%	30%	14%	24%	27%	41%
Enrollment	120	120	128	119	125	110	121
Enrollment Rate	82%	50%	27%	71%	51%	54%	46%
% Female Students	43%	33%	32%	37%	38%	30%	26%
% International Students	10%	31%	37%	29%	36%	26%	26%
Average Age	26	28	28	29	29	28	27
Undergraduate GPA	3.63	3.43	3.46	3.54	3.38	3.42	3.37
Prior Work Experience (mo.)	48	66	60	72	72	65	61
% Work Experience	56%	96%	90%	98%	99%	95%	96.0%
% Seeking New Employment	96%	88%	76%	95%	96%	90%	84%
Average Base Salary (\$000)	101	107	103	103	112	112	104
Reporting Salary Data	99%	81%	79%	85%	85%	78%	79%
Employed at Graduation	95%	79%	79%	79%	85%	75%	76%
Employed 3-mo. After	99%	92%	96%	95%	98%	81%	90%
Signing Bonus (\$000)	13	23	20	20	29	26	22
% Receiving Signing Bonus	74%	73%	62%	71%	75%	71%	87%
Tuition and Fees (\$000)	47	102	112	88	94	112	102
Tuition and Fees – Residents	27	59	–	54	65	–	–
Average Indebtedness (\$000)	36	58	72	50	32	60	74
Students with Debt	44%	48%	61%	34%	63%	40%	42%
Payback Period (months)	26	47	54	48	39	43	50
Payback Period – Residents	21	36	–	39	32	–	–

### About the Data

Data in this report are compiled primarily from two sources: (1) Institute records on admissions and employment published annually; and (2) publicly available information from each of the universities chosen for comparison and compiled by U.S. News in its annual ranking of business schools. Business schools comply with certain accepted guidelines in compiling admissions and employment data, and the Institute abides by those guidelines, as closely as possible, in its own reporting.

Please make note of the following:

- (1) The MSA is 10-months in duration (running from late June to early May each year. By comparison, Full-time MBA program are typically 21 months (or four semesters over two academic years.
- (2) The length of the MBA program adds to the overall cost of degree, in terms of tuition, and lost wages while in school. The cost can be mitigated by summer internships between the first and second year.
- (3) About half of MSA candidates enter the program without prior professional work experience (i.e., directly out of their undergraduate degree program). By contrast, in the benchmark, almost all MBA candidates have prior work experience averaging more than 5 years. For this reason, data for MSA candidates with prior work experience is used in the benchmark comparison on starting salaries. Although it reduces the size of the population for comparison, it's important to note that MSA salary reporting is 99% compares to 81% on average for the MBA programs in the benchmark.
- (4) The benchmark report is updated annually. Universities used in the comparison may change due to changing in the ranking, as well as changes in the cohort sizes.
- (5) The Return on Investment (ROI) payback period does not taken into account scholarship money that may have been received by a student. It is calculated as follows:

$$\text{Payback period (months)} = \frac{((\text{Pre-Salary} + \text{Tuition}) \times \text{Duration}) - (\text{Signing Bonus} + \text{Summer Salary})}{(\text{Post-Salary} - \text{Pre-Salary})} \times 12$$

Source URL: <http://analytics.ncsu.edu/reports/benchmark/2017.pdf>

<http://analytics.ncsu.edu>

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